

GOVERNMENT OF INDIA

ARCHAEOLOGICAL SURVEY OF INDIA

Central Archaeological Library

NEW DELHI

ACC. NO. 72151

CALL NO. 913.5491/Mit

D:GA 79

Recd
4/7/87

EXCAVATIONS AT TILaura-KOT AND KODAN
AND
EXPLORATIONS IN THE NEPALESE TARAI

**REPORT ON THE WORK UNDERTAKEN IN 1962
JOINTLY BY THE DEPARTMENT OF ARCHAEOLOGY,
HIS MAJESTY'S GOVERNMENT OF NEPAL,
AND THE ARCHAEOLOGICAL SURVEY OF INDIA**



72151

913.5491

Mit

BY

DEBALA MITRA

**DIRECTOR, ARCHAEOLOGICAL SURVEY OF INDIA
GOVERNMENT OF INDIA**

1972

PRICE: Rs. 30.00

72151

अवधिप्त संख्या

दि १४

23-9-83

विहस संख्या

912.5491/Mit

संख्या संज्ञा

केन्द्रीय पुरातत्त्व प्रसक्तकाल

1972

PUBLISHED BY

THE DEPARTMENT OF ARCHAEOLOGY

HIS MAJESTY'S GOVERNMENT OF NEPAL

(AND FINANCED BY THE INDIAN CO-OPERATION MISSION)

Printed at

M/S. LALCHAND ROY & CO. PRIVATE LTD.

7 & 7/1, GRANT LANE, CALCUTTA-12

FOREWORD

Archaeology in Nepal is now making rapid strides, and this book is a proof of the advance made in this direction. The excavations at Tilaura-kot and Kodan, and the explorations of many ancient sites in the neighbourhood, particularly those briefly visited and reported upon by P. C. Mukherjee as far back as 1899, of which all this is a studied account and much more, were the outcome of a joint venture in the Tarai regions in 1962 between the Archaeological Survey of India and the Department of Archaeology, HMG, Nepal. The report of the work written by the leader of the joint team, Smt. Debala Mitra of the Archaeological Survey of India, would be useful to and welcomed by all scholars of the archaeology of Nepal. It comes closely in the wake of two other recent archaeological reports, by Dr. S. B. Deo, on the *Archaeological Investigations in Nepal Terai: 1964* and *Archaeological Excavations at Kathmandu: 1965*, respectively published by the Department in 1968.

The present report spans the progress in the field in the period between 1899, when the area was explored extensively for the first time following the discovery of Aśoka's inscribed pillar at Lumbini, and 1962, when the world had also witnessed considerable development in the technique of archaeological excavations and records. It also takes into account the work done at Lumbini in 1933-34 at the instance of His Late Highness Kaiser Shumsher Jang Bahadur Rana.

In the neighbouring fields of India a good deal of archaeological work has been done in the past, beginning from 1861, but more intensively between 1944 and the present day, thanks to the tremendous drive of Dr. (now Sir) Mortimer Wheeler as Director General of Archaeology in India in the years 1944-48, and later of his successors and illustrious pupils who now man various fields of archaeological activity throughout the country.

The mass of material available in India now from the early levels of occupation provides ample comparable evidence for purposes of assessment of the inevitable cultural and chronological affiliations of the Nepalese materials as well, and makes our task all the easier. The value of Nepalese contribution to the fuller understanding of the early archaeology of India can in this context be easily appreciated.

I avail myself of the opportunity of thanking Shri A. Ghosh, formerly Director General of Archaeology in India, whose forethought and choice of personnel on the Indian side, technical help of a variety and, above all, his solicitude and ready

FOREWORD

co-operation which made these archaeological activities in Nepal possible. I must also thank the authorities of the Indian Co-operation Mission, Nepal, who have helped to organize the works and have also financed the publication of the reports. Finally, I wish to thank sincerely all my colleagues, of both India and Nepal, and, most of all, the author, for their respective shares in the work of which this is the visual form.

KATHMANDU,
October 1969

R. J. THAPA
Director,
Department of Archaeology,
HMG, Nepal

CONTENTS

	PAGE
I. Introduction	1
II. Previous work	5
III. Excavation at Tilaura-kot	9-155
1. The site and its environs	9
2. The cutting—TLK-I	11
3. Chronology	15
4. The pottery	16
A. Introductory	16
B. Period I	16
(i) The Northern Black Polished Ware	18
(ii) The black-and-red ware	20
(iii) Other wares	21
Red ware	22
Grey ware	23
Description of select types	25
C. Miscellaneous pottery	78
Description of select types	79
5. Other finds	83
A. Coins	84
(i) Copper coins with a four-spoked wheel	85
Oblong or square struck coins	85
Circular struck coins	86
Circular cast coins	86
(ii) Punch-marked coins	87
(iii) Miscellaneous uninscribed cast copper coins	88
(iv) Miscellaneous copper coins	90
(v) Inscribed copper coins	91
Catalogue of legible coins	91
B. Sealings and inscribed potsherds	99
C. Terracottas	100
(i) Human figurines	100
(ii) Animal figurines	108
(iii) Toy-carts and toy-wheels	116
(iv) Miscellaneous objects	117
D. Stone objects	120
E. Beads	123
F. Bangles	141
G. Metal objects	143
(i) Gold	143
(ii) Silver	144
(iii) Copper	144
(iv) Bronze	145
(v) Iron	147

CONTENTS

	PAGE
H. Bone and ivory objects	152
I. Glass objects	154
J. Roof-tiles	155
IV. Excavation at Kodan	156-183
1. Previous explorations and notices	156
2. The site	157
3. The mounds	158
4. Stratigraphy	159
5. Chronology	159
6. General observations	161
7. The structures	163
A. The well	163
B. Temple 1	164
(i) Platform	165
(ii) Sanctuary of Period I	167
(iii) Porch	168
(iv) Sanctuary of Period II	170
C. Temple 2	172
8. The pottery	174
9. Chemical analysis of plaster and concrete	182
V. Animal-remains from Tilaura-kot and Kodan	184-192
VI. Explorations	193-249
1. General observations	193
2. Lumbini (District Bhairhwa)	196
Stone figures	199
Terracotta figures	201
Bronze figures	203
Coin	203
Beads	203
Ear-stud	204
Dabbers	204
Decorated bricks and tiles	204
The pottery	204
Other surface finds	205
3. Nipania (District Bhairhwa)	205
4. Pipri (District Taulihawa)	208
5. Kadzahawa (District Taulihawa)	210
6. Lamtiya (District Taulihawa)	214
7. Sisania (District Taulihawa)	215
8. Bamhni (District Taulihawa)	217
9. Hardewa (District Taulihawa)	219
10. Sonagarh (District Taulihawa)	219
11. Saina-Maina (District Bhairhwa)	221
12. Sirinagra (District Taulihawa)	222
13. Bikuli (District Taulihawa)	222
14. Chaganth (District Taulihawa)	223
15. Patharkot (District Taulihawa)	224

CONTENTS

	PAGE
16. Patkahawa (District Taulihawa)	224
17. Bijua (District Taulihawa)	225
18. Araura-kot (District Taulihawa)	225
19. Piprahwa (District Bhairhwa)	226
20. Daldalha (District Taulihawa)	226
21. Dohni (District Taulihawa)	227
22. Sihokhor (District Taulihawa)	227
23. Parora (District Bhairhwa)	227
24. Gotihawa (District Taulihawa)	228
25. Dohni (District Taulihawa)	229
26. Siwalwa (District Taulihawa)	230
27. Sagrahawa (District Taulihawa)	231
28. Chatradi (District Taulihawa)	248
29. Patna (District Taulihawa)	248
30. Other sites	249
Appendix: Pottery-making at Lausadiya	250-252

LIST OF PLATES

- I. Tilaura-kot 1962: fortified area and successive beds of the Banganga
- II. Tilaura-kot 1962: trench across fortification, section of western face
- III. Tilaura-kot 1962: plan of trench TLK-1
- IV. Kodan 1962: section across Temples 1 and 2
- V. Kodan 1962: plan of Temple 1
- VI. Kodan 1962: plan of Temple 2
- VII. Foot-hills of the Himalayas near Patharkot
- VIII. The Banganga near Tilaura-kot
- IX. A. The Banganga with a Thāru girl in the foreground
B. A bejewelled girl of Kodan
- X. A. Tilaura: village
B. Tilaura-kot: jungle-clad mound
- XI. Tilaura-kot: jungle-clad eastern rampart and flanking dried-up moat
- XII. Tilaura-kot: eastern gate with rampart before jungle-clearance
- XIII. Tilaura-kot: eastern gate with rampart after partial jungle-clearance
- XIV. A. Tilaura-kot: Sāmāi-māyi temple
B. Tilaura-kot: terracotta animals offered to Sāmāi-māyi
- XV. A. Tilaura-kot: a part of the rampart after partial jungle-clearance
B. Tilaura-kot: north-eastern corner of the fortified mound
- XVI. Tilaura-kot: northern rampart in which the trench TLK-1 was laid
- XVII. Tilaura-kot: a view of the trench TLK-1 with the inner (southern) face of the brick fortification wall immediately over the mud rampart and the floor (on which a worker is seen)
- XVIII. Tilaura-kot: a view of the trench TLK-1 with the outer (northern) face of the brick fortification wall
- XIX. A. Tilaura-kot: Structure 1
B. Tilaura-kot: Structure 2
- XX. Tilaura-kot: view of the trench TLK-1 with Ring-well 1
- XXI. Tilaura-kot: view of the trench TLK-1 with Ring-wells 1 and 2
- XXII. Tilaura-kot: sherds with graffiti
- XXIII. A. Tilaura-kot: sherds of red ware with painted bands
B. Tilaura-kot: sherds of grey ware with indifferent paintings (?)
- XXIV. A. Tilaura-kot: impressed sherds of red ware
B. Tilaura-kot: incised and decorated sherds of red ware
- XXV. A. Tilaura-kot: incised sherds of red ware
B. Tilaura-kot: perforated sherds of red ware
- XXVI. Tilaura-kot: coins
- XXVII. Tilaura-kot: 1 and 3, terracotta sealings; 2, terracotta ball with stamped symbols; 4 and 5, inscribed sherds; 6 and 7, sherds with stamped wheels
- XXVIII. Tilaura-kot: terracotta human figurines
- XXIX. Tilaura-kot: terracotta human figurines
- XXX. Tilaura-kot: terracotta human figurines
- XXXI. Tilaura-kot: terracotta human figurines
- XXXII. Tilaura-kot: terracotta human figurines
- XXXIII. Tilaura-kot: terracotta human figurines

- XXXIV. Tilaura-kot: terracotta human figurines and a fragment of a plaque with Gaja-Lakshmi (?)
- XXXV. Tilaura-kot: terracotta human figurines
- XXXVI. A. Tilaura-kot: terracotta elephants
B. Tilaura-kot: terracotta animals
- XXXVII. A. Tilaura-kot: terracotta elephants
B. Tilaura-kot: terracotta animals
- XXXVIII. A. Tilaura-kot: terracotta horses
B. Tilaura-kot: terracotta horse and wheel
- XXXIX. A. Tilaura-kot: terracotta animals and birds
B. Tilaura-kot: terracotta animals
- XL. A. Tilaura-kot: terracotta toy-carts
B. Tilaura-kot: terracotta muller or polisher
- XLI. Tilaura-kot: miscellaneous terracotta objects
- XLII. A. Tilaura-kot: miscellaneous terracotta objects
B. Tilaura-kot: miscellaneous terracotta objects
- XLIII. A. Tilaura-kot: stone stool-quern and muller
B. Tilaura-kot: miscellaneous stone objects
- XLIV. Tilaura-kot: beads
- XLV. Tilaura-kot: beads
- XLVI. Tilaura-kot: terracotta beads
- XLVII. A. Tilaura-kot: bangles
B. Tilaura-kot: gold objects
C. Tilaura-kot: miniature glass bowls
- XLVIII. Tilaura-kot: miscellaneous copper objects and bronze vessels
- XLIX. Tilaura-kot: iron nails,
L. Tilaura-kot: miscellaneous iron objects
- LII. Tilaura-kot: miscellaneous bone and ivory objects
- LIII. Kodan: northernmost (dexter) and highest (sinister) mounds
- LIII. Kodan: mound with an octagonal temple on top
- LIV. Kodan: partially-exposed platform of a temple buried within the mound supporting an octagonal temple
- LV. A. Kodan: *linga* found during the partial clearance of the mound with an octagonal temple on top.
B. Kodan: partially-exposed wall of a temple buried within the mound supporting an octagonal temple
- LVI. Kodan: highest mound on the west bank of a tank
- LVII. Kodan: northernmost mound
- LVIII. Kodan: well during excavation, north and west sides
- LIX. Kodan: well after excavation, north and west sides
- LX. Kodan: fully-exposed well (foreground) and a part of Temple I
- LXI. A. Kodan: well, interior with animal bones
B. Kodan: well during excavation, south and west sides
- LXII. Kodan: well, carved south façade
- LXIII. Kodan: Temple I under excavation
- LXIV. Kodan: Temple I, north side
- LXV. Kodan: Temple I, intervening space between the brick wall of the platform and the porch of Period I

LIST OF PLATES

- LXVI. Kodan: Temple 1, part of the ornate north façade of the platform
- LXVII. Kodan: Temple 1, part of the ornate north façade of the platform
- LXVIII. Kodan: Temple 1, part of the ornate north façade of the platform
- LXIX. Kodan: Temple 1, part of the ornate north façade of the platform
- LXX. Kodan: Temple 1, part of the ornate north façade of the platform
- LXXI. Kodan: Temple 1, part of the ornate north façade of the platform
- LXXII. A. Kodan: Temple 1, details of decoration on the façade of the platform
- B. Kodan: Temple 1, details of decoration on the façade of the platform
- LXXIII. Kodan: Temple 1, north side of the staircase and the adjoining east side of the platform
- LXXIV. Kodan: Temple 1, south side of the staircase and the adjoining east side of the platform
- LXXV. Kodan: Temple 1, front view of the ruined staircase
- LXXVI. Kodan: Temple 1, basement of the sanctuary of Period I, over which is seen the lower part of the sanctuary of Period II
- LXXVII. A. Kodan: Temple 1, portion of the east and north-eastern faces of the sanctuary of Period I, behind which is seen the sanctuary of Period II
- B. Kodan: Temple 1, north-eastern face of the sanctuary of Period I, behind which is seen the sanctuary of Period II
- LXXVIII. A. Kodan: Temple 1, part of the west wall of the porch of Period I adjoining the sanctuary of Period II
- B. Kodan: Temple 1, part of the north wall of the porch of Period I
- LXXIX. Kodan: Temple 1, chases in the interior walls of the porch of Period I
- LXXX. A. Kodan: Temple 1, east flank of the north side of the sanctuary of Period II
- B. Kodan: Temple 1, north side of the sanctuary of Period II
- LXXXI. A. Kodan: Temple 1, east flank of the north side of the sanctuary of Period II, below which is seen a part of the north-eastern face of the sanctuary of Period I
- B. Kodan: Temple 1, west side of the sanctuary of Period II
- LXXXII. Kodan: Temple 1, portions of the north and west sides of the sanctuary of Period II
- LXXXIII. A. Kodan: Temple 1, base of the pilaster at the north-eastern corner of the interior of the sanctuary of Period II
- B. Kodan: Temple 1, east face of the sanctuary of Period II with stepped entrance-passage
- LXXXIV. Kodan: Temple 1, interior of the sanctuary of Period II
- LXXXV. A. Kodan: Temple 1, moulded stones flanking the entrance-passage of the sanctuary of Period II
- B. Kodan: Temple 1, section across the entrance-passage of the sanctuary of Period II, below which is seen a chase
- LXXXVI. A. Kodan: Temple 1, fragment of an image of Kārttikeya
- B. Kodan: Temple 1, chases in the entrance-passage of the sanctuary of Period II
- C. Kodan: fragments of an image of Mahishāsura-mardini
- LXXXVII. A. Kodan: Temple 1, fragment of a sculpture
- B. Kodan: Temple 1, gargoyle shaped like the head of a *makara*
- LXXXVIII. A. Kodan: Temple 1, moulded and carved stones
- B. Kodan: Temple 2, iron clamps
- LXXXIX. Kodan: Temple 2 under excavation
- XC. Kodan: Temples 1 and 2 and well, general view
- XCI. Kodan: Temple 2, south side

LIST OF PLATES

- XCII. Kodan: Temple 2, portions of south and west sides of the basement of the sanctuary
- XCIII. Kodan: Temple 2, west face of the basement of the sanctuary
- XCIV. A. Kodan: Temple 2, south-western corner of the basement of the sanctuary
B. Kodan: Temple 2, north-western corner of the basement of the sanctuary
- XCV. A. Kodan: Temple 2, north-eastern corner of the basement of the sanctuary and the foundation-wall of the adjoining cell
B. Kodan: Temple 2, south-eastern corner of the basement of the sanctuary and the foundation-wall of the adjoining cell
- XCVI. Kodan: Temple 2, east side
- XCVII. A. Kodan: Temple 2, part of the cell-foundation of the porch
B. Kodan: Temple 2, part of the cell-foundation of the porch
- XCVIII. A and B. Kodan: Temple 2, carved bricks
- XCIX. A and B. Kodan: Temple 2, carved bricks
C. A and B. Kodan: Temple 2, carved bricks
CI. A, B and C. Kodan: Temple 2, carved bricks
CII. A, B and C. Kodan: Temple 2, carved bricks
CIII. A, B and C. Kodan: Temple 2, carved bricks
CIV. A, B and C. Kodan: Temple 2, carved bricks
CV. A, B and C. Kodan: Temple 2, carved bricks
CVI. A and B. Kodan: Temple 2, carved bricks
CVII. A and B. Kodan: Temple 2, carved bricks
CVIII. A and B. Kodan: Temple 2, carved bricks
CIX. A and B. Kodan: Temple 2, carved bricks
CX. A and B. Kodan: Temple 2, carved bricks
CXI. A and B. Kodan: Temple 2, carved bricks
CXII. A, B, C and D. Kodan: Temple 2, carved bricks
- CXIII. Kodan: decorated and perforated sherds
- CXIV. Animal-remains: 1, 3-11 and 14 from Tilaura-kot; 12 and 13 from Kodan; 2 from Harappa (for comparison)
- CXV. A. Lumbini: general view of the monuments and the ancient tank (behind the tree)
B. Lumbini: brick structures
- CXVI. A. Lumbini: pillar of Aśoka
B. Lumbini: pillar of Aśoka, lower part
- CXVII. Lumbini: ancient sculpture depicting the nativity of Buddha
- CXVIII. A. Lumbini: modern sculpture depicting the nativity of Buddha
B. Lumbini: fragment of a sculpture with two standing figures extant
- CXIX. A. Lumbini: head of Buddha
B. Lumbini: 1, Maitreya; 2, Buddha in *bhūmi-sparśa-mudrā*
- CXX. A. Lumbini: 1, lower portion of an image of Buddha; 2, fragment of a sculpture with head extant
B. Lumbini: 1, fragment of a sculpture representing the Eight Great Miracles in the life of Buddha; 2, fragment of a sculpture representing a divine couple
- CXXI. Lumbini: Bodhisattva (Maitreya?)
- CXXII. A. Lumbini: 1, head of Bodhisattva; 2, fragment of an image of Lokeshvara
B. Lumbini: 1, torso; 2, image of Gaṇeśa
- CXXIII. A. Lumbini: four late sculptured plaques
B. Lumbini: terracotta architectural piece with the head of Buddha
- CXXIV. A and B. Lumbini: terracotta heads

LIST OF PLATES

- CXXV. A. Lumbini: terracotta heads
 B. Lumbini: 1, terracotta female bust; 2, lower portion of a terracotta figure
- CXXVI. A. Lumbini: fragment of a terracotta tile with kneeling figures
 B. Lumbini: 1, crudely-modelled bust of a terracotta figurine; 2, terracotta head
- CXXVII. Lumbini: leaf-shaped plaque with a relief of Mañjuśrī (?) and the Buddhist creed
- CXXVIII. Lumbini: 1, bronze devotee; 2, bronze Bodhisattva
- CXXIX. A. Lumbini: 1-4, terracotta beads; 5, stone bead; 6, jasper ear-stud; 7, Kushān coin
 B. Lumbini: miscellaneous objects
- CXXX. A. Lumbini: terracotta dabbers
 B. Lumbini: carved bricks
 C. Lumbini: carved bricks
- CXXXI. A. Nipania: part of the mound by the side of the Dano
 B. Nipania: eroded section of the mound
- CXXXII. A. Coins: 1, 5 and 6 from Sisania; 2 and 3 from Kadhahawa; 4 from Pipri; 7 from Lamtiya; 8 from Nipania
 B. Nipania: 1 and 3, terracotta animals; 2, 4 and 7, terracotta beads; 5, terracotta net-sinker or loom-weight; 6, agate bead; 8, glass bangle
- CXXXIII. Pipri: 1, 2 and 3, terracotta human figurines; 4 and 5, terracotta beads; 6, perforated terracotta disc
- CXXXIV. A. Pipri: 1, terracotta female figurine; 2, terracotta foot
 B. Pipri: terracotta animal figurines
- CXXXV. A. Kadhahawa: terracotta human figurines
 B. Kadhahawa: terracotta human figurines
- CXXXVI. A. Kadhahawa: fragments of terracotta votive tanks
 B. Kadhahawa: miscellaneous terracotta objects
- CXXXVII. A. Terracotta objects: 1 and 2, human figurines from Bamhni; 5, animal torso from Bamhni; 3, sealing from Lamtiya; 4, head from Lamtiya; 6, bead from Lamtiya; 7, fragment of a stamp (?) from Lamtiya; 8, ball from Lamtiya
 B. Sisania: 1-3, terracotta human figurines; 4, terracotta muller-shaped object
- CXXXVIII. Sisania: general view of the mound
- CXXXIX. A. Miscellaneous terracotta animal figurines:
 1 and 3 from Sirinagra; 2 from Hardewa; 4 from Bijua; 5 and 6 from Patkahawa
 B. Sonagarh: stone image of Chāmunda
- CXL. A. Sonagarh: ruined brick structure
 B. Sonagarh: ruined wall of a brick structure
- CXLI. A. Sonagarh: the Sukhbel
 B. Sonagarh: ruins of brick structures choked with jungle
- CXLII. A. Bankatwa village near Saina-Maina
 B. Saina-Maina: first rise of the hill
- CXLIII. A. Saina-Maina: inscribed pillar
 B. Saina-Maina: damaged *amalaka*
- CXLIV. A. Saina-Maina: door-jamb
 B. Saina-Maina: lintel
- CXLV. A. Chaganth: Thāru hut
 B. Chaganth: Thāru family
- CXLVI. A. Chaganth: Thāru woman at basket-work
 B. Chaganth: ruined brick structure
- CXLVII. Chaganth: jungle-clad mound

- CXLVIII. A. Hill overlooking Patharkot
B. Patharkot: shops
- CXLIX. A. Patharkot: porters
B. Patharkot: mound
- CL. Miscellaneous terracotta objects: 1, ball from Patharkot; 2, disc made of sherd from Piprahwa; 3, fragment of a disc from Sihokhor; 4, animal from Sihokhor; 6, moulded tile from Sihokhor; 5, lower part of a dabber from Chaganth
- CLI. A. Dohni: general view of the mound
B. Dohni: votive offerings in the form of terracotta animal figurines
- CLII. A. Gotihawa: *stūpa* covered by cow-dung cakes
B. Gotihawa: pillar
- CLIII. A. Dohni: image of Vishṇu (?), front view
B. Dohni: image of Vishṇu (?), back view
C. Dohni: two fragments of an image of Śūrya
- CLIV. A. Siwalwa: general view of the mound
B. Siwalwa: two fragments of a lintel
- CLV. A. Siwalwa: right door-jamb
B. Siwalwa: lower part of the right door-jamb
C. Siwalwa: left door-jamb
- CLVI. A. Siwalwa: door-sill
B. Siwalwa: door-step (?)
- CLVII. A. Chatradi: jungle-clad ruins
B. Patna: image of Gaṅgā
- CLVIII. A. Nigali-sagar: general view of the tank with the pillar of Aśoka in the foreground
B. Nigali-sagar: upper fragment of the pillar of Aśoka
- CLIX. A. Nigali-sagar: middle fragment of the pillar of Aśoka
B. Nigali-sagar: inscription of Aśoka on the middle fragment of the pillar
- CLX. A. Lausadiya: potters' residence
B. Lausadiya: potter at work. Terracotta dabbers, wooden beaters and earthen basins, with which the pots are given the desired shape, are seen in the foreground
- CLXI. A. Lausadiya: pot on wheel
B. Lausadiya: kiln—an open shallow pit
- CLXII. Lausadiya: sun-dried pots heaped up on a bed of dried cow-dung within the kiln
- CLXIII. A. Lausadiya: heap of pots covered with dried cow-dung
B. Lausadiya: potter applying a thin clay-coat over the shroud of straw
- CLXIV. A. Lausadiya: clay-coated heap
B. Lausadiya: fire in the process of being lit through the central shaft with the help of burning cow-dung cake

LIST OF FIGURES

	PAGE
1. Tilaura-kot 1962: contour-map	10
2. Tilaura-kot: pottery from Period I (Northern Black Polished Ware)	18
3. Tilaura-kot: pottery from Period I (black-and-red ware)	20
4. Tilaura-kot: pottery from Period I (other wares)	24
5. Tilaura-kot: pottery from Period I (other wares)	26
6. Tilaura-kot: pottery from Period I (other wares)	28
7. Tilaura-kot: pottery from Period I (other wares)	32
8. Tilaura-kot: pottery from Period I (other wares)	36
9. Tilaura-kot: pottery from Period I (other wares)	40
10. Tilaura-kot: pottery from Period I (other wares)	42
11. Tilaura-kot: pottery from Period I (other wares)	44
12. Tilaura-kot: pottery from Period I (other wares)	46
13. Tilaura-kot: pottery from Period I (other wares)	50
14. Tilaura-kot: pottery from Period I (other wares)	54
15. Tilaura-kot: pottery from Period I (other wares)	58
16. Tilaura-kot: pottery from Period I (other wares)	60
17. Tilaura-kot: pottery from Period I (other wares)	62
18. Tilaura-kot: pottery from Period I (other wares)	64
19. Tilaura-kot: pottery from Period I (other wares)	68
20. Tilaura-kot: pottery from Period I (other wares)	70
21. Tilaura-kot: pottery from Period I (other wares)	74
22. Tilaura-kot: pottery from Period I (other wares)	76
23. Tilaura-kot: miscellaneous pottery	80
24. Tilaura-kot: miscellaneous pottery	82
25. Tilaura-kot: beads	134
26. Tilaura-kot: beads	136
27. Tilaura-kot: beads	138
28. Tilaura-kot: terracotta beads	140
29. Tilaura-kot: miscellaneous copper objects and bronze vessels	146
30. Tilaura-kot: iron nails	149
31. Tilaura-kot: miscellaneous iron objects	151
32. Kodan 1962: schematic plans of Temples 1 and 2 and the well	160
33. Kodan: plan of the well	162
34. Kodan: pottery	176
35. Kodan: pottery	179
36. Kodan: pottery	181
37. Map of sites explored in 1962	194
38. Sagrahawa: carved bricks of Structure 2	232
39. Sagrahawa: 1, bottom layer of bricks of Structure 8; 2, copper vase found beneath the central brick of 1; 3, key-plan of Structure 8	234
40. Sagrahawa: 1, bottom layer of bricks of Structure 9; 2, copper vase with lid and contents found beneath the central brick of 1; 3, key-plan of Structure 9	236

LIST OF FIGURES

	PAGE
41. Sagrahawa: 1, bottom layer of bricks of Structure 6; 2, lotus-carved brick below 1; 3, key-plan of Structure 6	238
42. Sagrahawa: 1, bottom layer of bricks of Structure 5; 2, copper vases found below the lotus-carved bricks of 1	240
43. Sagrahawa: 1, bottom layer of bricks of Structure 15; 2, two of the vases found below the lotus-carved bricks of 1	241
44. Sagrahawa: 1, bottom layer of bricks of Structure 2; 2, vase with its contents found below the lotus-marked brick of 1	242
45. Sagrahawa: 1, bottom layer of bricks of Structure 1; 2, section of bricks covering vase in Structure 1; 3, lotus-carved brick overlying vase of Structure 1; 8, vase of Structure 1; 4 and 6, lotus-marked brick of Structure 4 and objects found in the hollow centre of the lotus-marked brick of the structure; 5 and 7, lotus-marked brick of Structure 3 and vase with contents found below the lotus-marked brick of the structure	244
46. Sagrahawa: 1, bottom layer of bricks of Structure 13; 2, bronze footed vessel found below the lotus-marked brick of 1; 3 and 4, section and plan of the polygonal brick of Structure 14, which held a copper vase in its central socket; 5, lotus-marked brick overlying the copper vase of Structure 14; 6, copper vase in Structure 14	245
47. Sagrahawa: 1, lotus-carved brick overlying the copper vase of Structure 10; 2, layer of bricks over 1; 3, layer of bricks over 2; 4, key-plan of Structure 10	246
48. Sagrahawa: 1, lotus-marked brick of Structure 12 which covered three vases; 2, one of the vases found below 1	247



I. INTRODUCTION

IN 1959 the Indian Co-operation Mission in Nepal was requested by His Majesty's Government of Nepal to obtain a senior archaeologist from India to advise the Government on the reorganization of its Department of Archaeology. Accordingly, Shri A. Ghosh, Director General of Archaeology in India, who was deputed by the Government of India for the purpose, visited Kathmandu for about ten days in May and June 1960 and made several recommendations for the improvement of archaeology and its service in the country. The excavations and explorations described in this report were the outcome of one of his recommendations and were undertaken as a joint venture of the Department of Archaeology, His Majesty's Government of Nepal, and the Archaeological Survey of India. The excavations were preceded by fairly detailed explorations in the central Tarai (below, p. 193, fig. 37). Already something of the archaeological potentialities of the region was known, thanks to the previous work (below, p. 5) which served to guide the present author in planning out her programme of explorations and selection of sites for excavations, keeping in view the public interest that a project of excavation in the Lumbini region was likely to evoke.

In February 1962 the Government of India sanctioned the deputation of the author (at that time Superintendent, Eastern Circle, Archaeological Survey of India) and the following members of the Archaeological Survey of India to Nepal for three months and a half for carrying out excavations and explorations in the Lumbini-Kapilavastu area in the central Tarai: Shri Sushanta Kumar Mukherji, Technical Assistant; Shri Sanat Kumar Ghosh, Surveyor; Shri Ajit Kumar Ghose, Draftsman; Shri Kalachand Das, Photographer; Shri Rakhal Chandra Roy, Upper Division Clerk; and Shri Bajrang Singh, Driver-Mechanic.

According to the instructions that the author had received from the Director General of Archaeology in India prior to her departure, the party, with its camp at Lumbini, was to carry out an exploration of the Tarai region around Lumbini, select a suitable site for excavation and then start excavation after shifting the camp to a place near the site. Funds were to be provided by the Indian Co-operation Mission in Nepal which had sponsored the project.

The party detrained at Nowgarh (District Gorakhpur, India) on the 12th February 1962 and reached Lumbini the same day by its jeep. Customs-clearance was arranged by Shri Janak Lal Sharma, Chief Research Officer, who represented the Department of Archaeology, His Majesty's Government of Nepal, and was with the party throughout its stay in Nepal.

The party camped at Lumbini up to the 26th February and surveyed a number of sites, some of them already known as a result of the explorations carried out late in the nineteenth century by archaeologists from India. Ultimately, the author decided to excavate at Tilaura-kot and Kodan, the former for the vestiges of ancient habitation and the latter for religious structures.

To be nearer the sites, the party shifted its camp near Tilaura-kot on the 26th. In the absence of any other arrangement, it stayed in a small unfurnished dharmasala at Ram Ghat. It may be mentioned here that the stay at Lumbini had to be prolonged by a week due to lack of accommodation even in that dharmasala which had been occupied by a few *sādhus*. This interval was utilized in studying the problems of conservation at Lumbini and in exposing limitedly the base of the pillar of Aśoka there with a view to examining its buried lower part.

Though the author intended to commence first the excavation at Tilaura-kot, which was at that time choked with vast jungle, immediately after encamping at Ram Ghat, the plan could not be implemented for want of labourers. Consequently, excavation was started at Kodan, where some local persons, thanks to the assistance of the District Magistrate of Taulihawa, agreed to work. When, in the first week of April, this work had progressed sufficiently to present an idea of the structures to be exposed, the author left it under Shri Sushanta Kumar Mukherji, visiting it afterwards every now and then to watch the progress and to give instructions, and began at Tilaura-kot. By that time Shri Sanat Kumar Ghosh, guarded against wild animals by armed police kindly provided by His Majesty's Government of Nepal, had cleared the fortified area of its jungle and started preparing the contour-map of Tilaura-kot. Having at her disposal barely two months, the author laid a small trench across the fortification. During the latter part of the work the party was considerably handicapped by rains which had set in by the last week of May and stood in the way of getting good photographs of the excavations at their close.

The Director General of Archaeology in India arrived at the camp on the 18th of May and, but for a break of four days, when he went to Kathmandu to discuss the principle of the division of antiquities, stayed there till the 29th, during which period he inspected the excavations and the site of Lumbini. Shri S. S. Bhandarkar, the then Member (Education), Indian Co-operation Mission in Nepal, joined him on the 20th with Shri R. J. Thapa, Director of the Department of Archaeology, His Majesty's Government of Nepal, who had once paid a visit earlier as well.

On the recommendations of the Director General of Archaeology in India, the halt of the party was extended so that all the members, except Shri Ajit Kumar Ghose, left for India on the 20th June. Shri Ghose left on the 1st July after completing the plan of the exposed structures of Kodan. Before leaving Nepal, the author made over to Shri Bhandarkar notes on the conservation of the monuments at Lumbini and Gotihawa which were not in a good state of preservation and left detailed instructions with the

Overseer of His Majesty's Government of Nepal on the conservation of the newly-excavated structures at Kodan. The old bricks that had been found in the débris of the structures and would be necessary for repairs were left neatly stacked for use.

The author will be failing in her duty if she does not mention the great help that she received from different persons in this context. She is immensely beholden to Shri Sushanta Kumar Mukherji, Technical Assistant, Shri Kalachand Das, Photographer, Shri Sanat Kumar Ghosh, Surveyor, Shri Rakhal Chandra Roy, Upper Division Clerk, and Shri Bajrang Singh, Driver-Mechanic, all of the Eastern Circle of the Archaeological Survey of India, and Shri Ajit Kumar Ghose, Draftsman of the office of the Director General of Archaeology in India, for their closest co-operation in the field. All of them worked hard and ungrudgingly under trying circumstances and took a keen interest throughout the explorations. Shri Sushanta Kumar Mukherji rendered considerable assistance in the excavation of Kodan. Shri Kalachand Das took photographs of the explored sites, excavations and the antiquities of Lumbini. Shri Sanat Kumar Ghosh, apart from preparing the contour-map of Tilaura-kot and the map of the successive beds of the Banganga near Tilaura-kot, drew the plan and section of the trench at Tilaura-kot, section of the temples at Kodan and the map of the explored sites. Shri Ajit Kumar Ghose was responsible for both the original drawings of the plans of the monuments at Kodan and their fair copies.

Shri Sudhir Kumar Neogi and Shri Sudhir Kumar Kundu, Draftsmen of the Eastern Circle of the Survey, assisted Shri Sanat Kumar Ghosh in making the drawings prepared by him ready for the press. While the majority of the illustrated sherds from Tilaura-kot were drawn by Shri Amir Singh, Shri Ram Babu, Shri Jassu Ram and Shri Ajit Kumar Ghose, all Draftsmen in the office of the Director General of Archaeology, the credit for the drawings of the pottery of Kodan and some sherds from Tilaura-kot goes to Shri S. K. Jagtap, Shri J. S. Dubey and Shri R. K. Khare, Draftsmen of the Excavations Branch. The drawings of beads were produced mostly by Shri Raghuraj Kishore, Draftsman of the Temple-Survey Project, and partly by Shri Amir Singh. Shri Anokhi Lal Verma, Draftsman of the Temple-Survey Project, drew the copper objects and Shri Amir Singh reproduced the two bronze vessels. The iron objects were drawn by Shri Ajit Kumar Ghose. Shri Ram Saran Sharma, Draftsman of the Temple-Survey Project, rendered help in pasting the pottery-drawings. To all these persons of the Archaeological Survey of India the author's grateful acknowledgements are due.

The author is also thankful to Shri K. S. Mani and Shri Moolchand Jhabak, both Photographers of the Temple-Survey Project of the Survey, for the photographs of the antiquities other than those of Lumbini.

Shri Dilip Kumar Guha, Curator, Archaeological Section, Indian Museum, Calcutta, has obliged the author by furnishing the measurements and weights of the coins.

The author is under great obligations to Dr. B. B. Lal, Chief Archaeological Chemist, Archaeological Survey of India, for his report on plaster and concrete from

Kodan, to Shri Bhola Nath, Vertebrate Zoologist, Zoological Survey of India, for his report on animal-remains from Tilaura-kot and Kodan and to Dr. Z. A. Desai, Superintending Archaeologist, Persian and Arabic Inscriptions, Archaeological Survey of India, for his identification of the coin of 'Alāu'd-Dīn Khaljī from Nipania. The Carbon-14 Laboratory of the Tata Institute of Fundamental Research, Bombay, has kindly measured and dated a charcoal-sample from Kodan.

The author is indebted to Dr. S. C. Chatterji and Shri D. K. Chakravarti, respectively Professor and Reader of Geology, Vikram University, Ujjain, for their kind help in the identification of the material of the beads.

The author also owes thanks to Shri K. M. Thomas of the Temple-Survey Project of the Survey for typing the entire matter.

Her thanks are also due to Shri Janak Lal Sharma, Chief Research Officer, Department of Archaeology, His Majesty's Government of Nepal, who participated all through in the explorations and excavations and rendered various kinds of help during the stay of the party in the Tarai, Shri Kirti Bahadur Bist, the then District Magistrate of Taulihawa, who helped the party in getting the dharmasala at Ram Ghat for its stay and the first batch of labourers, and Shri R. J. Thapa, Director, Department of Archaeology, His Majesty's Government of Nepal.

In the end, the author wishes to record her gratitude to Shri S. S. Bhandarkar, the then Member (Education), Indian Co-operation Mission, for his personal interest in the project, to the Mission itself for financing the project and to Dr. N. R. Banerjee, Archaeological Adviser, His Majesty's Government of Nepal, for his active interest in the publication of the work.

II. PREVIOUS WORK

THE report, in newspapers, of the discovery of a pillar of Aśoka at Bairat, a deserted site in *pargana* Kolhuwa of Tahsil Nepalganj, by Major Jaskaran Singh of Balrampur (District Gonda, Uttar Pradesh, India) in March 1893¹ attracted for the first time the attention of the archaeologists and orientalist towards this part of the Nepalese Tarai, the potentiality of which had hitherto been unknown. In March 1895 A. Führer, Archaeological Surveyor, North-western Provinces and Oudh Circle, was deputed to take estampages of the inscription on the pillar. He found the pillar not at Bairat but on the bank of a large tank, called Nigali-sagar² (fig. 37). On this occasion Führer received the news about a second pillar near Bhagwanpur (close to Rummin-dei). The purport of the inscription on the lower fragment of the pillar at Nigali-sagar created great sensation among scholars. L. A. Waddell was the first to point out that the pillar, with the record of Aśoka about the enlargement of the *stūpa* of Kanakamuni (which lay within a few kilometres of Kapilavastu according to Fa-hien and Hiuen Tsang), would be a sure indicator towards the lost site of Kapilavastu,³ hitherto searched too far to the south in Gorakhpur and Basti Districts of India. The Government of India moved the Nepal Government for the permission to explore the area around Nigali-sagar.

Führer was again sent in 1896⁴ to advise on the excavation of Kanakamuni's *stūpa* which, however, was not attempted, though he gave an elaborate description of the *nirvāṇa-stūpa* of this Mānushi-Buddha close to the inscribed pillar, the latter claimed by Führer to be *in situ*.⁵ The Nepalese authorities were induced to excavate the lower part of the partly-buried pillar at Rummin-dei. The result was the momentous discovery of Aśoka's record which proved the identification of Rummin-dei with the ancient Lumbini (fig. 37). Führer identified Krakuchchhanda's town with the mounds between Kodan (fig. 37) and Gotihawa (fig. 37) and his *nirvāṇa-stūpa* with the *stūpa* of Gotihawa. He vaguely traced the natal town of Kanakamuni near the hamlets of Tilaura and Gobari and the site of Kapilavastu 'between lat. 27° 32'-38° N. and long. 38° 3'-10° E. in the middle

¹ *Progress Report, Arch. Surv., North-western Provinces and Oudh Circle, 1893-94*, p. 22.

² *Ibid.*, 1894-95, p. 1.

³ L. A. Waddell, 'The Discovery of the Birthplace of the Buddha', *Journ. Royal Asiatic Society of Great Britain and Ireland*, 1897, pp. 644-51.

⁴ A. Führer, *Monograph on Buddha Sakyamuni's Birth-Place in the Nepalese Tarai*, Arch. Surv. North. Ind., VI (Allahabad, 1897); *Prog. Rep., Arch. Surv., N.-W. P. and Oudh Circle, 1896-97*, pp. 1-5.

⁵ Neither was the pillar *in situ*, nor was there any trace of a *stūpa* near by, as proved conclusively by the explorations of Waddell and Mukherji in 1899.

of a dense *sāl* forest over a length of about seven miles from the villages of Amauli, Baidauli, Harnāmpūr, and Bikuli (north-east) to Śivagarh, Tilaurakot, and Rāmghāt on the Bangangā (south-west), and over a breadth of about three to four miles from the villages of Rāmapura, Ahirauli, and Śrinagar on the south to the villages of Jagdishpūr and Nagrāvah on the north¹.

Führer was once again commissioned in December 1897 to assist, with advice and suggestions, Chauttariya Captain Bir Jang of Butaul-Tansen deputed by the Nepal Darbar to supervise the excavation which started on the 22nd December 1897 and lasted till the beginning of March 1898.² The major part of the operations was on the banks of a large tank, called Sagar, in Sagrahawa (fig. 37), where in the name of excavation³ was perpetuated a wholesale destruction. The sole object having been the recovery of treasures and reliquaries, the structures were ruthlessly destroyed down to their foundations, where were generally encountered in most cases vases with some deposit (pp. 231 ff.). Thus disappeared completely seventeen so-called square *stūpas* and a conspicuously large structure (called *stūpa* with attached monastery) leaving pit-like depressions. No necessity was felt for a comprehensive record in the form of adequate description and photographs. Nor was there any attempt to understand the nature of these structures, singular on account of the symbols, chiefly of weapons, on the bricks, usually of the last course of the foundations. These structures were summarily disposed as the *stūpas* containing the relics of the Śākyas massacred by King Viṣṇudabha of Kosala. Führer's attempts to associate the names of eighteen Śākyas, including Mahānāman, with these structures on the false claim of the find of writings in pre-Aśokan characters were fortunately foiled in time by V. A. Smith, who paid a surprise visit during the excavation in progress and exposed the forgery fully to the public.⁴ Thus, whatever limited work was undertaken was not only on the destructive lines, but was mixed with dangerous fabrications.

At Bikuli (fig. 37) were located the ruins of three temples and at Gotihawa was exposed, by the side of the *stūpa*, the lower portion of a pillar of Aśoka *in situ*.

The Government of India was apprised of the fact that Führer's work was not only full of mistakes and fabrications but was also incomplete. Realizing that such a promising field should not be left unexplored, the Government, in communication with the Nepalese authorities, deputed P. C. Mukherji to explore the area, to prepare records in the form of drawings, estampages, maps and photographs, to locate and plot precisely

¹ *Prog. Rep., Arch. Surv., North-western Provinces and Oudh Circle*, 1897-98, pp. 1-3; *An. Prog. Rep., Arch. Surv., North-western Provinces and Oudh Circle* for the year ending 30th June 1899, pp. 1 and 2.

² The excavation was in continuation of the previous year's digging by the Nepalese; P. C. Mukherji, *A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal*, Arch. Surv. Ind., Imperial Series, XXVI, part 1 (Calcutta, 1901), pp. 25 and 26.

³ *An. Prog. Rep., Arch. Surv., North-western Provinces and Oudh Circle* for the year ending 30th June 1899, pp. 1 and 2; Prefatory Note to P. C. Mukherji's *A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal* (Calcutta, 1901), pp. 3 and 4.

Kapilavastu with its gates, to map the *stūpas* of Krakuchehhanda and Kanakamuni and to prepare a rough plan showing the distribution of the ruins. Major Waddell also obtained permission to carry out his own investigations.

The full account of P. C. Mukherji's work during February and March 1899 is embodied in his illustrated book entitled *A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal*. Considering the limited time at his disposal and condition under which he worked practically single-handed with a sole draftsman, who, too, joined him late, his work is highly satisfactory. His report and drawings present a fair idea of his faithful and keen observation. He was, however, partially obsessed by the Buddhist association of the region, which led him to recognize Buddhist monuments in several structures and mounds in spite of the absence of specifically Buddhist antiquities. Such commissions are quite admissible considering the time in which he worked and which witnessed the discovery of the pillar of Kanakamuni, Lumbini and the *stūpa* of Piprahwa¹ (District Basti bordering the Nepalese Tarai, fig. 37) in the area. Indeed, the tempo of research on the native town of Śākyamuni had reached its zenith in the last decade of the nineteenth century.

Mukherji identified Tilaura-kot with Kapilavastu and supported Führer in his identification of the *stūpa* of Gotihawa with Krakuchehhanda's *stūpa* and of the structures on the bank of the Sagar with the *stūpas* commemorating the massacre of the Śākyas. Though he could not alight upon the alleged *stūpa* of Kanakamuni in the vicinity of Nigali-sagar and confirmed the findings of Major Waddell, who had exposed the broken bottom of the pillar, to the effect that the pillar was not *in situ*, he felt that the heavy pillar could not have been removed far away from the original site. Accordingly, he identified Araura-kot (fig. 37) with Kanakamuni's town. According to him, the arrow-well of Hiuen Tsang corresponded to either Panreki Sisania (fig. 37) or Piprahwa (fig. 37) of District Basti (India).

Apart from his trial-excavations at Tilaura-kot, Chitradei (Chatradi, fig. 37) and Rummin-dei, he traced, by superficial excavation, the *stūpa* of Gotihawa in which a trench had been laid by Waddell² from the centre to the circumference towards the pillar, re-examined the sites noticed by Führer and explored a few new sites. He also supplied some very useful information on the Buddhist remains of Piprahwa (District Basti, India) exposed by Peppé and the demolished structures on the banks of Sagar. Further, he took the trouble of repairing one of the omissions of Führer by preparing, with the help of the latter's draftsman, Bhairava Buksh, a sketch-map of Sagar with the remains and key-plans of a few structures containing bricks with symbols.

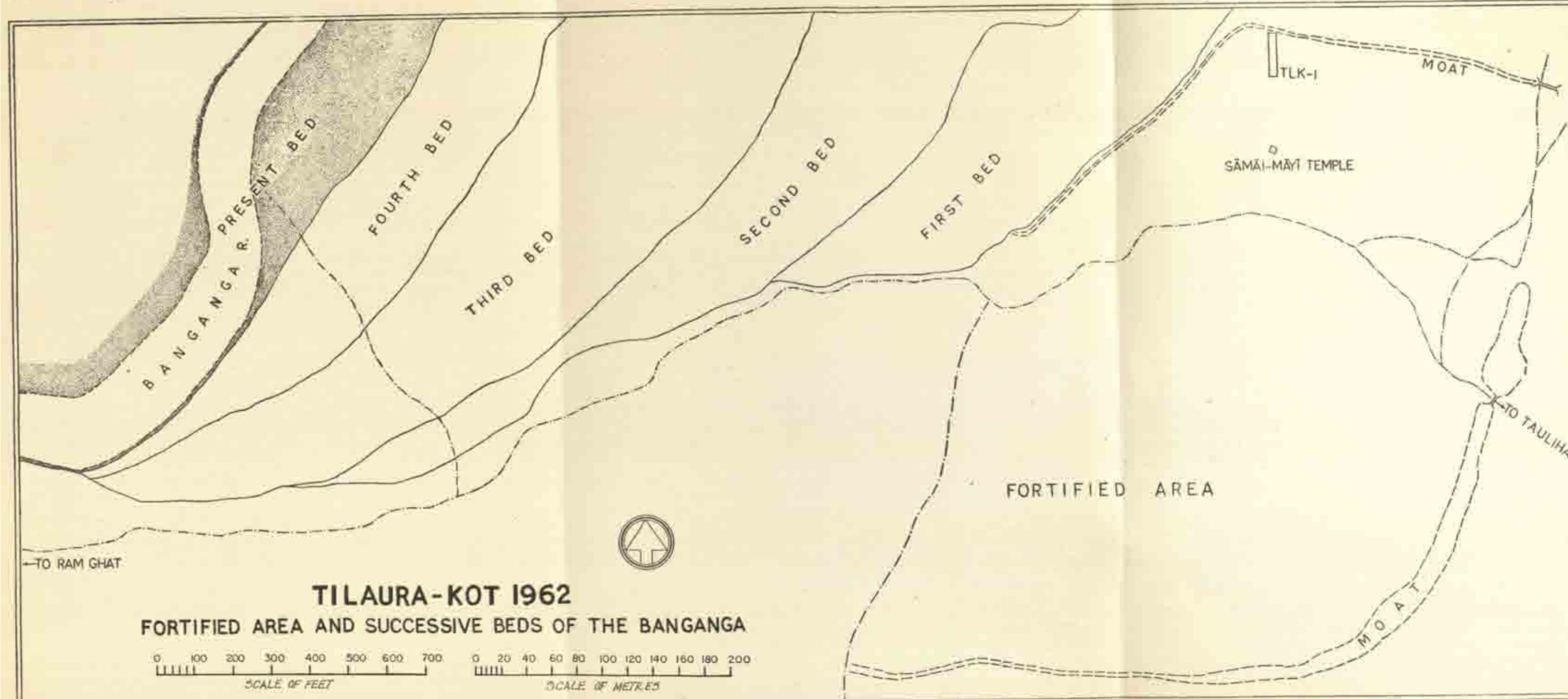
Three popular articles by General His Highness Prince Khadga Sumsher Jung Rana Bahadur, who was Governor of the western part of Nepal for some time,

¹ W. C. Peppé, 'The Piprahwa Stūpa, containing relics of Buddha', *Journ. Royal Asiatic Society of Great Britain and Ireland*, 1898, pp. 573-78; V. A. Smith, 'Note', *ibid.*, pp. 579-88.

² The author has failed to trace Waddell's report on his excavations in the Nepalese Tarai.

appeared in 1904 in the *Pioneer*.¹ Of hardly any archaeological importance, they were in the form of short notes on several sites in the present Districts of Taulihawa and Bhairhwa. He identified Saina-Maina (fig. 37) with Deva Daba (Deva-hrada), the native place of Mahāmāyā, mother of Buddha.

¹ 'Buddhist Archaeology in the Nepal Tarai', *The Pioneer* (Allahabad newspaper), 1st, 6th and 21st February, 1904.



III. EXCAVATION AT TILAUURA-KOT

1. THE SITE AND ITS ENVIRONS

THE ancient site of Tilaura-kot (lat. $27^{\circ} 34' 30''$ N.; long. $83^{\circ} 3' 30''$ E.), named after the *mauza* of Tilaura in which the *kot* (mound, fortified mound) is located, lies about three-fourth km. to the west of the village-habitation (pl. X A) of Tilaura, which, in turn, is situated at a straight distance of $3\frac{1}{2}$ km. to the north-north-east of Taulihawa (lat. $27^{\circ} 32' 30''$ N.; long. $83^{\circ} 3' 30''$ E.), a District headquarters in the central part of the Nepalese Tarai. Taulihawa itself is 21 km. to the north-east of Shohratgarh, a town in District Basti (Uttar Pradesh, India) and a railway-station on the Gonda-Gorakhpur loop-line of the North-eastern Railway. The two towns are connected with each other by a road, about half of which on the Indian side, up to Khunuan on the Indo-Nepalese border, is metalled. The foot of the nearest range of the lowest Himalayas (pl. VII) is at a distance of nearly 20 km. from Tilaura.

Tilaura-kot lies on the Taulihawa-Patharkot cart-track which passes through the eastern gate (pls. XII and XIII) of the ancient fortification and a recently-made opening in the corresponding western rampart. Surrounded on the east, south and west sides by fields, the site, with its dense jungle, is almost like a forest (pls. X B and XI) which extends northward for a considerable distance and is the resort of wild animals. Save for the temple (pl. XIV A) of Sāmāi-māyī, where some devotees assemble rather occasionally and offer terracotta animal figures (pl. XIV B) to the deity, the site is absolutely deserted.

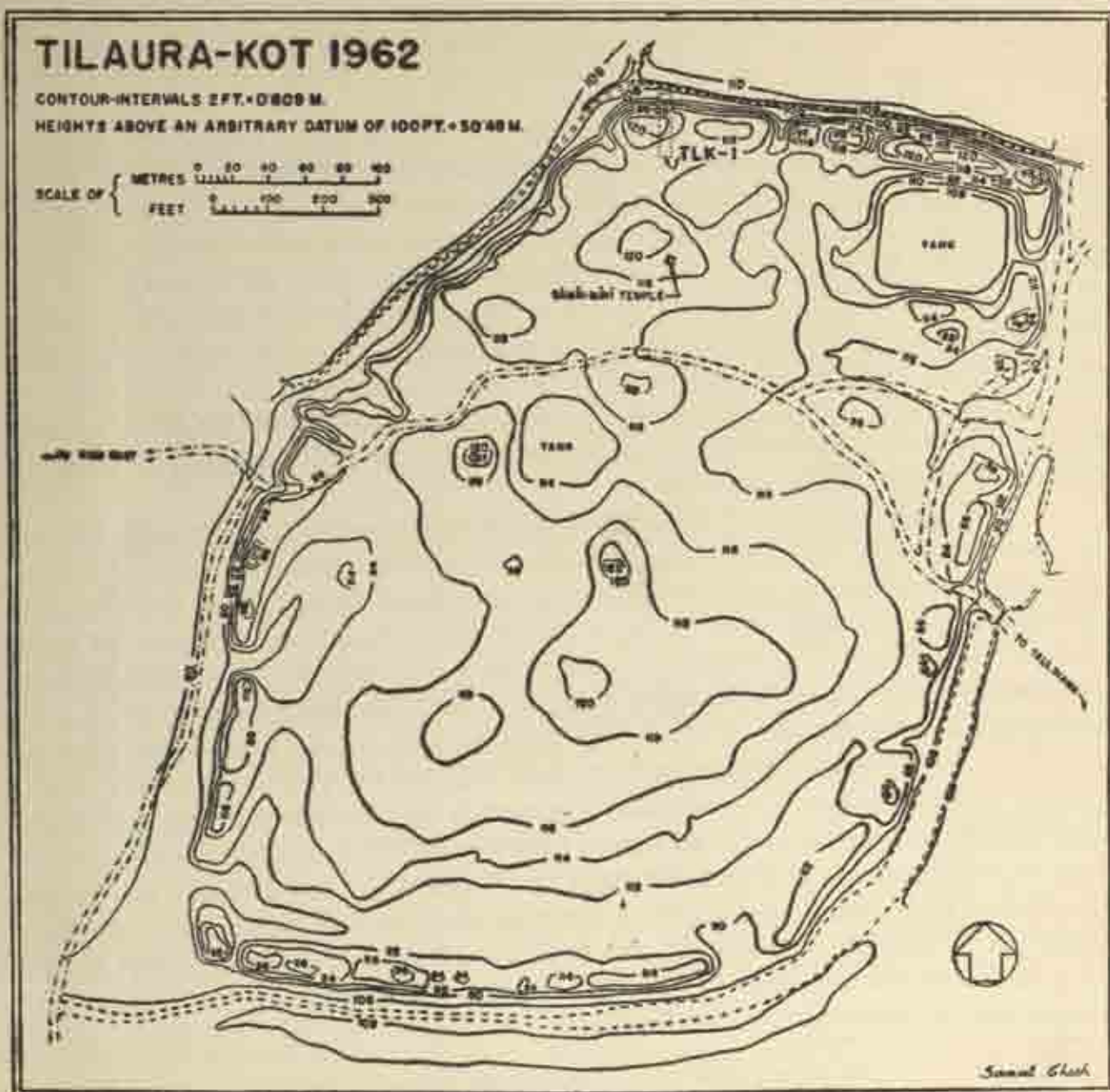
The rain-fed Banganga river¹ (pls. VIII and IX A), less than half a km. to the east of which Tilaura-kot is situated, originates in the Churia range, and mingles with the Burhi Rapti, and the combined waters, known as the Bilar, flow into the Rapti, which itself is a tributary of the Gogra (Ghaghra or Ghaghara). Five successive beds of this meandering river, including the present one, each receding towards the west, are clearly visible on the spot (pl. I). While the west bank of each stage of the river, except the last one, has been washed away by the next stage, the east banks present a terrace-like formation, the difference in the heights of the highest (of the first stage near the

¹ Of the streams which come down from the hills and unite with the Banganga, one is known as Kaila, a name reminiscent of Kapila. The straight distance between their confluence and Tilaura-kot is slightly above 12 km. Another stream, which joins the Tilar near Lumbini, is known as Koilahawa.

EXCAVATION AT TILAUURA-KOT

north-western corner of the fortified area) and the lowest (of the last and present) banks being nearly 34 m.

The ancient town represented by Tilaura-kot was located on the first (earliest) east bank of the river. As the difference between the natural soil on which the habitation sprang up and the second bank of the river is only 1.44 m., it seems that the river was at that time flowing in its second bed, as otherwise the settlement would have



been subjected to periodical floods. The part of the bank, on which the habitation grew up, took first a gentle and then a very sharp curve towards the west. On the river side the settlement followed these curves;¹ but on the other sides it had a more regular alignment.

During the lifetime of the town it was provided with a mud rampart and a brick fortification-wall (below, p. 12). On the east the fortification seems to have been more or less co-extensive with the limits of the then-existing settlement. On the south superficial observation indicates a narrow strip of uninhabited land, now marked by a low land, being included within its limits. In the southern flank of the west side a large slice of the ancient habitation was left out of the fortification, the west wall of which after running straight towards the north for a certain distance followed the curve of the ancient river-bank and of the existing habitation. As in the south flank of the west side, a substantial part of the habitation was again discarded on the north. The fortification (pl. XV A and B) was, thus, a rough pentagon on plan (fig. 1), as the northern flank of the western side conforming to the irregular bank was diagonal. In length it measures roughly 252 m. on the north, 458 m. on the east and 328 m. on the south, the straight distance between the central parts of the north and south sides and the east and west sides being respectively 500 m. and 405 m.

The extant maximum height of the rampart was slightly more than 5 m. above the level of the fields on the western side; it was in the north wall (pl. XVI) where the trench TLK-1 was laid.

Inside the fortification the surface is generally flat, a few existing humps being not more than 2.134 m. higher than the general surface. The more prominent mounds are perhaps due to a few medieval buildings that sprang up within the area unconnected with the main life of the town. Of the two tanks, the one near the north-east corner is both deep and large and contains water throughout the year.

2. THE CUTTING—TLK-1

A north-south trench (pl. XVII), TLK-1, was laid across the fortification in the northern part of the mound (pl. XVI) near its north-west corner to include the highest point of the fortification, being only 28 cm. lower than the highest point in the whole mound. The trench was planned as 28 m. long and 6 m. wide, but was extended by 4 m. on the north to cover some area outside the fortification. Owing to shortage of time, a width of 2.75 m. of the trench was excavated in its southern half, up to the brick fortification-wall which was fully exposed. Beyond the fortification-wall only a narrow strip (pl. XVIII) of 1.22 m. was excavated in the western part of the northern portion down to the natural soil, which, however, was reached in other parts as well of the trench.

¹ In Śrāvastī, also, the settlement took place on a turn of the Raptī (ancient Achirāvati).

The stratification (pl. II) in the trench was as follows:

Over the natural soil of hard sticky-clayey yellowish earth mixed with *kankar*-nodules, there was at places a thin layer, 8B, of sand with sparse pottery of the same types as in the overlying layer. The next upper two layers, 8A and 8, were more or less of an identical composition, viz. sandy pale-greenish earth, but were separated from each other by a thin streak of ash. In layers 8A and 8 there were limited sherds of the so-called Northern Black Polished Ware. In both there was an appreciable quantity of grey ware and black-slipped ware but red ware predominated.

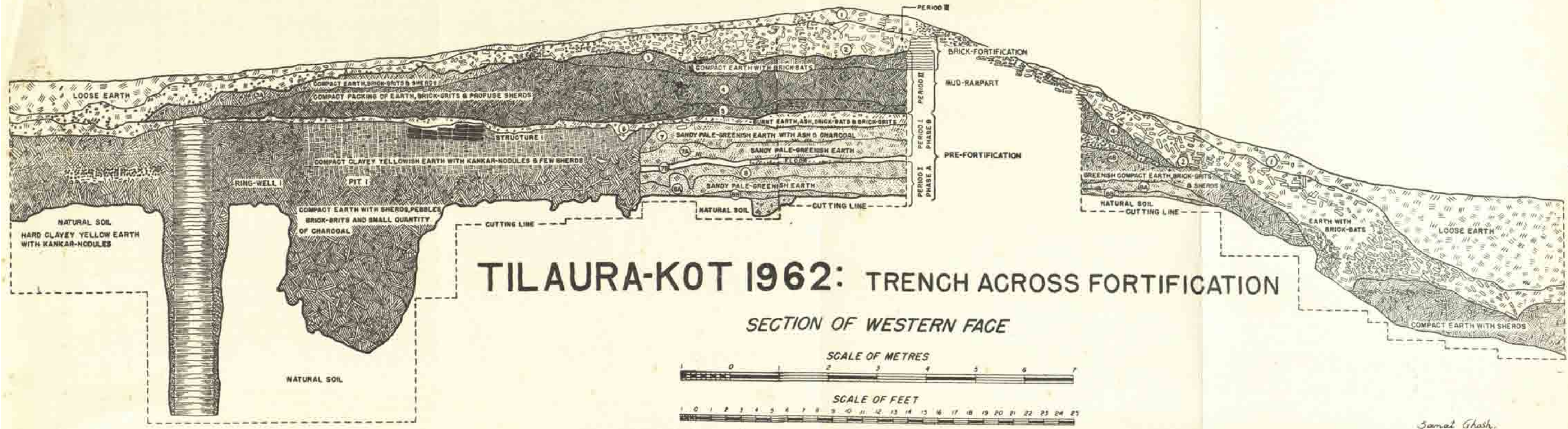
Layer 8 was partially sealed by a thin floor, made of rammed brick-bats and brick-grits, and 7B. In the next upper layer, 7A, of practically the same composition as layers 8A and 8, the Northern Black Polished Ware occurred in larger quantities than before, the other wares remaining more or less the same. The Northern Black Polished Ware was more limited in the overlying layer 7, distinguished from layer 7A by its greater ash-contents.

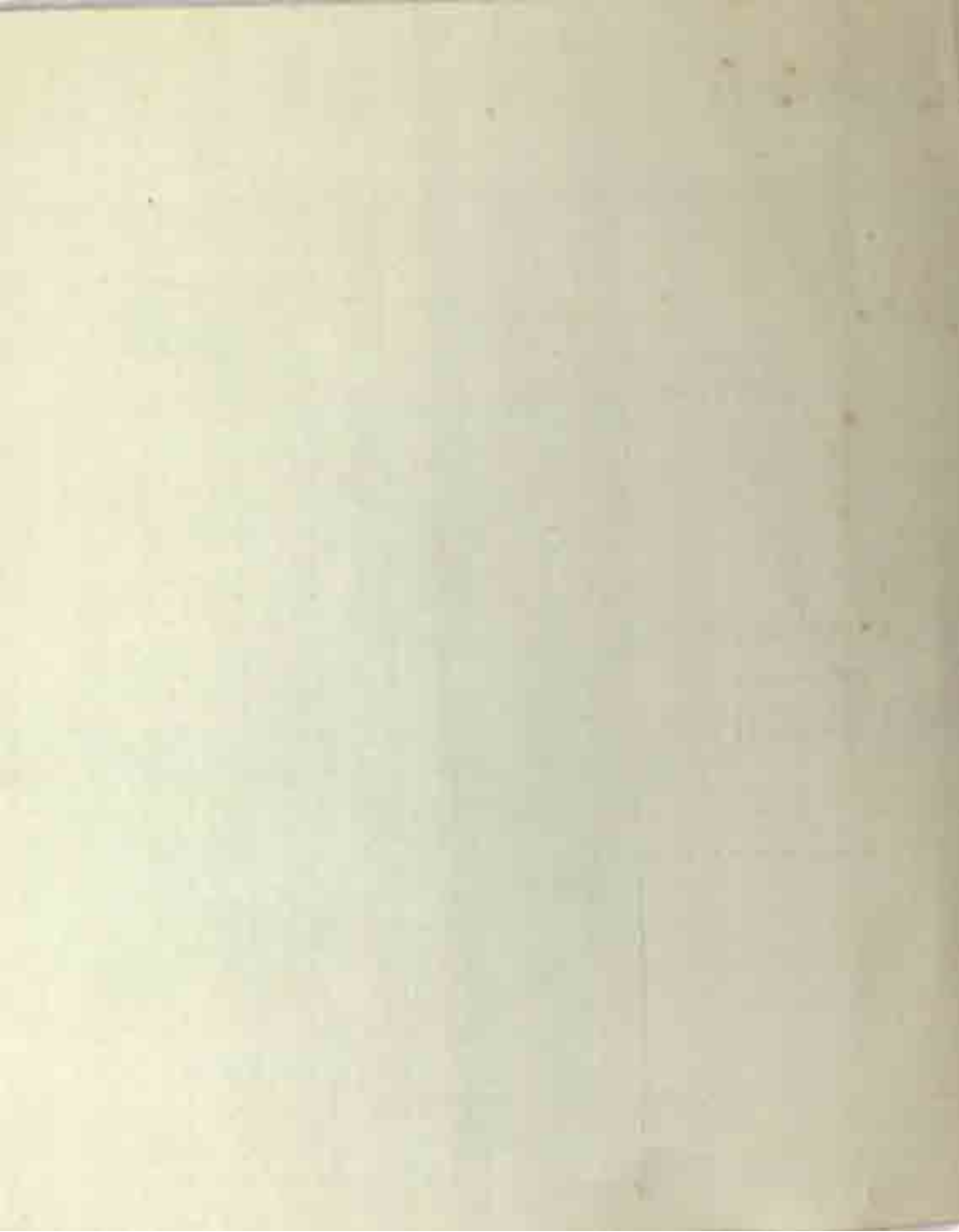
Next came a thin layer, 6. It consisted entirely of burnt material and, therefore, represented a conflagration that had taken place in the area.

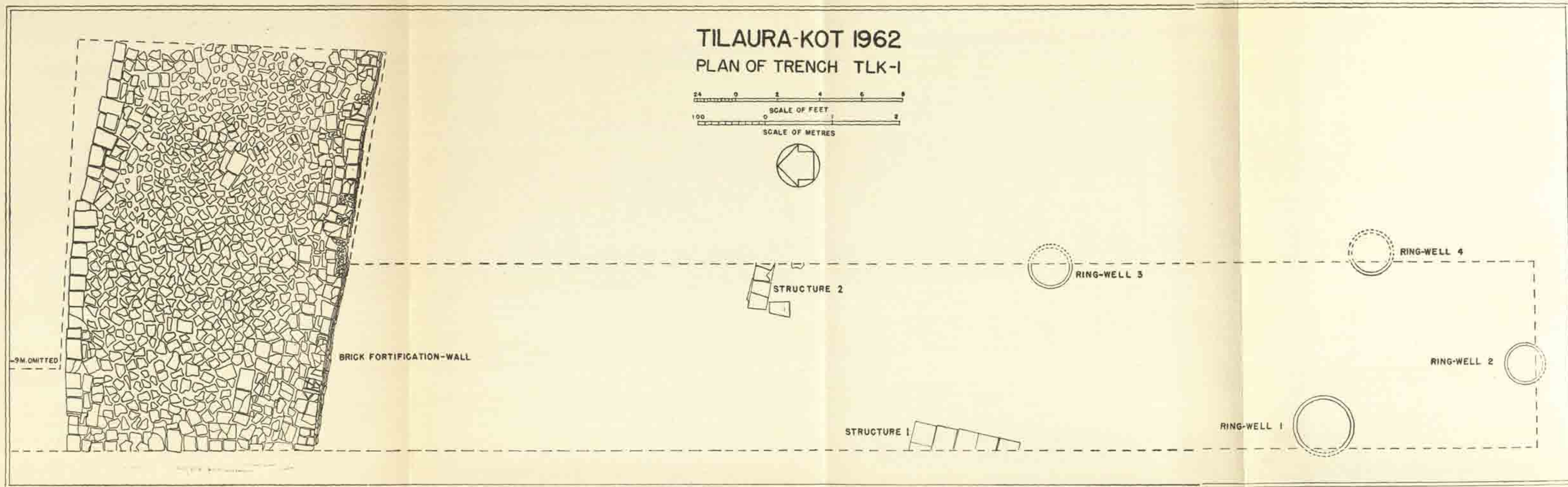
Layers 5, 4, 3 and 3A, the first and the last two only of limited length, in reality formed one and the same deposit, viz. heaped up material (compact packing of earth, profuse sherds and tiny brick-bats) to form a mud rampart. The material was, no doubt, derived by the scooping out of the soil outside, thus leaving there a moat. This also explains the fact that the pottery of these layers was of the same types as of the preceding layers but was somewhat water-worn.

On the sloping outer face of the mud rampart was constructed a fortification-wall of bricks and brick-bats (pls. II, III, XVII and XVIII). In the absence of any foundation-trench in layers 4 and 3 and of any trace of accumulation on the top of 4, the mud rampart and the brick fortification-wall appear to be contemporaneous at least in this trench.¹ While internally the base of the wall rested 96.5 cm. above the bottom of the mud rampart, it gradually sloped down externally towards the moat. Its inner face was found to a height of sixteen courses at the maximum, but the bricks of its outer face were reduced to a single course at places, the maximum number of courses being only five. The extant average thickness was 3.658 m. Its maximum available height, contributed by sixteen courses of bricks, was 85 cm. The average size of the full bricks was 31.7 × 20.3 × 5.1 cm. Laid in mud mortar the brickwork was of the most indifferent kind. The preservation of the wall was also extremely bad. It appears that the exterior face of the wall tilted to a considerable extent towards the outside. In the clay of the bricks were used husks in an extremely-limited quantity, and some of the bricks did not have them

¹ Due to want of time this point could not be cross-checked by taking a second trench across the fortification-wall in another part. The size of the bricks conformed to some extent to that of the exposed structures of Kodan.







at all. Against its inner (southern) face the heaping up of earth to heighten the rampart continued, covering up the lower part of the brick wall and serving as a protective ramp against the latter. As the extant wall rose only to a small height above the extant rampart there was no means of knowing if they were originally of the same height or if the wall rose to a greater height than the ramp.¹

Layer 2 represented the fall of the brick wall, as marked by the enormous *débris* (earth, bricks and brick-bats) of the wall present in it. The *débris* naturally sloped down outside into the moat and inside towards the toe of the ramp. Layer 1 was, as usual, the surface humus with loose earth and some brick-bats.

It appears that in the inner part of the trench, beyond the habitation represented by layers 8B, 8A, 8, 7B, 7A and 7, there existed originally an unoccupied piece of land with a large pit-like depression in the natural soil. With the accumulation of occupational deposits by its north side the pit gradually got partially filled up with material derived from these deposits. In its lower parts was, thus, found the same well-baked pottery of layers 8B, 8A and 8 and in the overlying parts the slightly water-worn pottery characteristic of layers 7A and 7. After the pit had, thus, got unevenly filled up to a certain height, its upper part along with the unoccupied low area² by the south side of the habitation was levelled up, in the later part of Phase B of Period I, by compact clayey earth and other fillings to provide a level ground for habitation including two brick structures very limitedly exposed in both the faces of the trench. The one (Structure 1) exposed in the western face represented the corner of a building (pl. III) and rested on a large patch of clay filling; there was no foundation-trench of this structure, the construction of its lower part and filling having gone on side by side. Its eastern face (pl. XIX A), consisting of four courses at the maximum height (31.7 cm.), was available to a length of 1.575 m. The bricks were placed one above the other without any bonding. They were, on average, 30.5 cm. square, the thickness being 7.6 cm. Structure 2 (pls. III and XIX B) consisted of only two courses of wedge-shaped bricks (average size being 29.2 × 22.9 and 17.1 × 7 cm.). The bricks of both these structures were made of natural clay (which has *kankar*-nodules) and profuse quantity of husks.

To the south of Structure 1, 3.912 m. away, and roughly contemporaneous with it was a ring-well (Ring-well 1, pl. III), 6.146 m. high, made of a succession of fifty-three terracotta rings of an average external diameter of 86.4 cm. (pls. XX and XXI). While its lower rings were buried in the natural soil, specially cut for the purpose, its upper rings were laid simultaneously with the filling of the pit and the low area, which

¹ The unbroken continuity or otherwise of the brick wall throughout the periphery of the fortified town could not be determined, as there was no time to extend the trench along the fortification.

² This area became low consequent on the rising habitation deposit by its north side. The entire filling-material of this pit and the low area has been referred to, for convenience's sake, as that of Pit 1. The antiquities of Pit 1 cannot be specifically ascribed to Phase A or Phase B of Period I.

explained the absence of the foundation-trench in the filling. The rings measured 11 cm. in height and 5 cm. and 2.5 cm. in thickness respectively of the rim and recessed middle portion.

Three more ring-wells were encountered near this ring-well. The one (Ring-well 2, pl. III) appearing in the southern section was 2.362 m. to the south-south-east of Ring-well 1. In it (pl. XXI) terracotta rings of two different diameters were used, the diameters of the lower and upper sets being respectively 73.7 cm. and 59.7 cm. The rings, 10 cm. on average height, had a thickness of 4.5 cm. and 2.5 cm. at the rim and the middle portion. The extant height of the ring-well was 1.625 m., the number of courses being twenty-one. As its bottom course lay much higher than the water-table, it could not have served as a water-well. The foundation-trench of the ring-well was cut with a provision of foot-rests. This ring-well and also Ring-well 3 were earlier than Ring-well 1 and most probably went to the early phase of Period I.

Ring-well 3 (pl. III), 3.760 m. to the north-east of Ring-well 1, was 65 cm. in diameter, the terracotta rings being 15 cm. high and 4 cm. and 1.5 cm. thick, on average, at the rim and the middle portion. The bottom of the well was not reached, as the twenty-sixth ring touched the water-level.

To the east-south-east of Ring-well 1, 1.905 m. away, was the fourth ring-well (pl. III), 67 cm. in diameter. Contemporaneous with Ring-wells 2 and 3, it was exposed to seven courses of rings. With an average height of 8 cm., the rings had a thickness of roughly 3.5 cm. and 2 cm. at the rim and middle portion.

On the exterior, the moat seems to have been cut into layers 4A (small brick-bats and brick-grits) and 4B (greenish compact earth with brick-grits and sherds), together corresponding to Phase B of Period I, and their underlying layers including the natural soil. Layer 4 represents the toe of the mud-rampart. Layers 2 and 1 were of the same nature and composition as the equivalent layers on the inner side of the rampart.

The total thickness of the deposit from the top of the natural soil right up to the highest point of the present surface was 3.861 m., out of which 1.5 m. was accounted for the mud rampart (at the maximum height), the material of which was brought from outside. The real habitation deposit (1.51 m. high) in the trench was, thus, limited in extent and did not naturally show much variation. Nevertheless, the deposit was divisible into three periods in terms of the fortification. Period I, pre-fortification, had two Phases. Phase A of Period I consisted of layers 8B, 8A and 8 underlying the floor. Ring-wells 2 and 3 and most probably 4 belonged to this phase. Phase B was represented by the floor and layers 7B, 7A and 7, ending in a conflagration (layer 6); the brick structures and Ring-well 1 were of this phase. Period II was characterised by the erection of the mud rampart (layers 5, 4, 3A and 3) and possibly the brick fortification-wall. Period III was the age of decay of the fortification-wall.

3. CHRONOLOGY

In terms of pottery (pp. 16 ff.) it may be said that Phase A of Period I was co-eval with the occurrence, at the site, of the Northern Black Polished Ware (The absence of the Ware in the fugitive layer 8B need not be emphasized in view of the limited area under excavation.). In the early level of Phase B of the same Period that Ware was in full currency. In both the Phases red and grey wares, known to be associated with the Northern Black Polished Ware at Hastināpura, were fully represented. The evidence of the pottery of Period II, the period of the mud rampart, has no independent value, as the material was brought from the pre-rampart deposit. The pottery found in the mud rampart is essentially similar to that of the pre-defence occupational deposit and does not include sherds which exhibit any individuality so as to isolate it from the pre-defence industry and to indicate a basic difference of culture of the actual builders. The cutting, in which practically there was no accumulation either during or immediately after the laying of the mud rampart, was not extensive enough to enable firm conclusions to be drawn in this respect.

On this basis, but with all reservations necessitated by the restricted extent of the trench, it may be expedient to concede that the settlement of the town may go back to about the sixth century B.C. (on the ground of the initial date of the Northern Black Polished Ware as arrived at Hastināpura), if not earlier. The beginning of the occupation at the particular area where the trench was laid was, however, later, as from layer 8B was obtained a sherd (pl. XXVII, 5) inscribed in characters not earlier than the third-second century B. C. (p. 100). The evidence of coins (pp. 84 ff.) and terracottas (pp. 100 ff.) is in general consonance with this. How long occupation continued is difficult to guess in the absence of real habitation deposits over the mud rampart in the outskirts of the fortified town, but it should be noted that nothing definitely post-Christian was met with in the trench except some sherds, towards the top of the layer 3, which came to be mixed up with the debris of the brick fortification-wall following its gradual decay in Period III. At the same time, the find of the so-called Pañchāla coin (pl. XXVI, 21) and a few crude terracotta figurines bearing affinity with some figurines from Period IV of Hastināpura on the surface elsewhere within the town speaks of a more or less continuous occupation till about the third century A.D. No object dating between this century and early medieval times has been found, and as such it is not known if the town was completely deserted or sparsely populated. In any case this period does not appear to be flourishing. The town was partially occupied in the early medieval times to which period decorated bricks found on the surface and comparable with those of Kodan and the late pottery belong. On the evidence of the earlier excavation by P. C. Mukherji it may be presumed that the humps (p. 11) inside the fortification contain structures contemporaneous with the temples of Kodan. This period was marked by brisk architectural activity, not only here but in a large part of the central Tarai, as attested by brick structures and carved bricks. The object of this building activity appeared to be more sacred than secular. In spite of the flourishing

religious edifices, the habitation, to judge again from the evidence of surface-finds, appeared to have been sporadic.

4. THE POTTERY

A. INTRODUCTORY

The excavated pottery of Tilaura-kot pertains practically to one period, viz. Period I, as the filling-material of the mud rampart, Period II, hailed from the habitation deposit of Period I. Layer 2, Period III, representing the dilapidation of the brick fortification-wall, was immediately above the mud rampart and yielded several sherds of the rampart-filling and a few sherds of the later period. The pottery of the two Phases of Period I and also Pit 1, which itself was filled with the stuff from some dump containing materials of both the Phases of Period I, does not show any material deviations. With the exception of a few stray sherds found near the top of the rampart immediately below layer 2, the sherds of the mud rampart, though somewhat water-worn, are essentially similar to those of Period I and do not mark any significant changes. The pottery has, therefore, been classified under two groups—one comprising the pottery of Period I and the other later stray sherds from layers 2 and 1 and surface. For illustrating the pottery of Period I, selection has mainly been made from sherds of pre-fortification layers and Pit 1. The sherds of the mud rampart are resorted to only in the case of the absence of the better-preserved specimens from pre-defence deposit. A few types, which are not found in the latter but are known from other sites to be contemporaneous with the pottery of Period I, have also been selected from the rampart-filling.

B. PERIOD I

The pottery of Period I, which from the very beginning reveals its familiarity with well-developed ceramic forms, is, in the main, similar to that of Period III (early sixth to early third century B.C.) from Hastināpura.¹ The majority of the types from the latter site is represented here. But the pottery of Period I here is not earlier than the third-second century B.C., which is the date of Phase A of Period I on the evidence of an inscribed sherd (p.100; pl. XXVII, 5).

The extensive group of pottery, result of mass-production, shows a wide range of shapes with many variants. Nearly all kinds of vessels required for daily domestic use and usable in earthenware are represented on a large scale, which evidently indicates the less popularity of the metal utensils—a presumption partially supported by the rarity of the latter.

Save for stray hand-made sherds, the entire range of pottery is wheel-turned. The vessels completely fashioned on wheels are usually restricted to some types of bowls

¹ *Ancient India*, nos. 10 and 11 (1954 and 1955), pp. 50 ff.

(e.g. Types *XVa*, *XVII* with its variants, *XX*, *XXVII*, *XXVIII* with its variants, *XXIX*, *XXXII* and *XXXIVa*), lids (e.g. Types *LXX* with its variants and *LXXI*), tumbler-like pots (e.g. Types *LXXXVI*, *LXXXVII*, *LXXXVIII*, *LXXXIX*, *XC* and *XCI* with its variants), miniature *ghatas* (e.g. Types *XCII*, *XCIV*, *XCVI* with its variants, *CVI* and *CVII*) and strainer-like vessels (e.g. Type *CLXXII*) which bore not merely striations on the body but the marks of the cutting-thread at the base. Generally the upper parts along with the rim and neck were left as they had been potted on the wheel, while the lower parts were beaten out, with the help of dabbers, to the required shape and size.

Avowedly utilitarian in purpose, the industry is for the most part plain. Decorations played a very insignificant role and were confined to simple patterns and rare painted bands. Specialized shapes are extremely rare.

Of the stamped sherds two types are of particular interest. One, struck by a circular die, contains a short record. Only one sherd of this kind has been recovered (p. 99; pl. XXVII, 4). The other type bears a four-spoked wheel (pl. XXVII, 6 and 7) which appears to have a special significance involving a definite meaning and purpose with reference to the ancient town of Tilaura-kot (p.85).

Graffiti occur on several sherds of both red and grey wares. While some of them are incised before the baking of the pots, others are post-firing. A few¹ of these graffito-bearing sherds are illustrated on pl. XXII. No. 1 of this plate presents a mark which resembles the Aśokan Brāhmī letter *ga* and corresponds to Symbol 1 of Shri B. B. Lal;² incised on a sherd of red ware from Pit 1, the mark is pre-firing, as the red slip lingers on the incision. On no. 2, of grey ware from Phase B of Period I, can be recognized Symbol 10 of Shri Lal, though here we have, in addition, two faintly-scratched oblique strokes emerging from the lower part of the vertical line; the mark without the oblique strokes roughly resembles the early Brāhmī letter *ka* and is post-firing. No. 3, of red ware from Phase A of Period I, bears a pre-fired symbol remotely analogous to Symbol 14 of Shri Lal. The pre-fired mark on no. 4, of red ware from Pit 1, is similar to Symbol 29 of Shri Lal; it is a rough execution of a four-spoked wheel, its better representation occurring on the stamped sherds (pl. XXVII, 6 and 7), a sealing (pl. XXVII, 1) and coins (pl. XXVI). The extant part of the post-fired mark on no. 5, of grey ware from Phase A of Period I, is somewhat akin to Symbol 30 of Shri Lal. On no. 6, of blackish-grey ware from Pit 1, occur two post-fired slightly oblique strokes parallel to each other, the dexter being shorter; the symbol appears to be a variant of Symbol 33 of Shri Lal. The available part of the pre-fired mark on no. 7, of red ware from Phase A of Period I, resembles the early Brāhmī letter *śa* and represents Symbol 23 of Shri Lal in the inverted position. The mark on no. 8, of red ware from Pit 1, consists of three slightly oblique strokes parallel to one another and

¹ An exhaustive tabulation of the symbols has not been possible, as the author had no access, at the time of her study, to the major part of the pottery handed over to the Nepal Government immediately after the excavation.

² *Ancient India*, no. 16 (1960), p. 7.

appears to be post-firing; it is similar to Symbol 34 of Shri Lal. The neatly-executed pre-fired mark on no. 9, of grey ware from Pit 1, is either the Brāhmi letter *sa* or a triskelion. On no. 10, of red ware from Pit 1, occur three post-fired marks in close proximity as in a record: the dexter is a single vertical stroke; the second, which is damaged by the fracture of the sherd itself, looks like two lines, one vertical and the other horizontal, crossing each other and joined by an oblique line which touches the lower end of the vertical line and the dexter end of the horizontal line (cf. Symbol 51 of Shri Lal); and the third looks like the Brāhmi letter *pa*.

The pottery of Period I has been classified under three heads, namely, (i) the Northern Black Polished Ware, (ii) the black-and-red ware and (iii) other wares.

(i) *The Northern Black Polished Ware*

None of the vessels of this Ware is complete. The sherds came variously from Phase A of Period I, lower level of Phase B of Period I and Pit 1, the majority being in Phase B of Period I. As to the date of this Ware in the present context it is certainly not earlier than the third century B.C. (p. 16) and is most probably not later than the second century B.C.

The colour of the surface of these sherds is usually coal-black and rarely steel-grey or silvery. A few have golden-brown patches. The core is either grey or reddish, the part immediately below the black surface being generally dull-red.

The determinable shapes in this Ware are (a) saucers which can as well be used as lids, (b) deep or shallow bowls with convex, receding or progressively widening

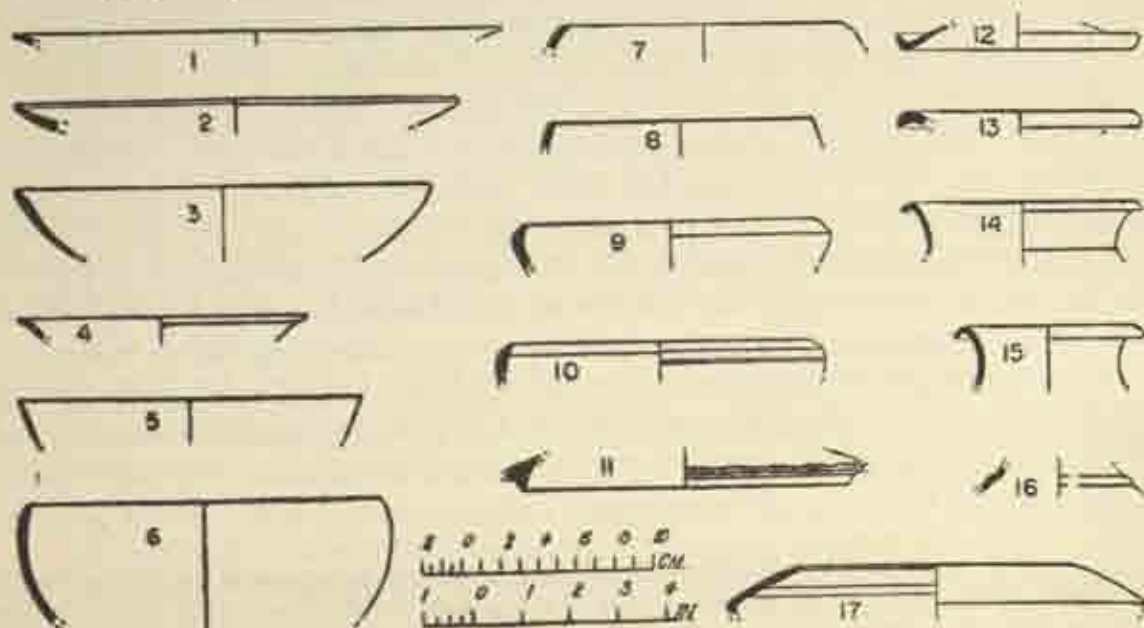


FIG. 2. Tilaura-kot: pottery from Period I (Northern Black Polished Ware)

sides, (c) small basins with receding sides, (d) lids with tapering sides, some with a projection for flanged vessels, (e) small vases with various rims and conspicuous necks, some with a cordon at the junction of the shoulder and neck and (f) carinated *hāṇḍīs*.

The following select specimens are illustrated on fig. 2.

1. Fragment of a saucer or lid of the Northern Black Polished Ware (N. B. P. Ware) with a splayed-out internally-thinned rim and sharply-receding sides. From an early level of Phase B of Period I.

2. Fragment of a saucer or lid of the N. B. P. Ware with an out-turned featureless rim and sides receding in a slight curve. From an early level of Phase B of Period I.

3. Fragment of a shallow bowl of the N. B. P. Ware with an out-turned featureless rim and curved sides thinning towards the base. From Pit 1.

4. Fragment of a shallow bowl or lid of the N. B. P. Ware with an everted flatly-bevelled rim and sharply-receding sides. From an early level of Phase B of Period I.

5. Fragment of a bowl of the N. B. P. Ware with an inconspicuously-everted sharpened rim and thin receding sides. From an early level of Phase B of Period I.

6. Fragment of a deep bowl of the N. B. P. Ware with an inturned featureless rim and a globular profile. The interior surface shows patches of lustrous brown colour. From an early level of Phase B of Period I.

7. Fragment of a deep bowl of the N. B. P. Ware with a narrowing featureless rim and a globular profile. From an early level of Phase B of Period I.

8. Fragment of a deep bowl of the N. B. P. Ware with an inconspicuously-closing flatly-bevelled rim and progressively-widening sides. From an early level of Phase B of Period I.

9. Fragment of a bowl or small basin of the N. B. P. Ware with an inturned externally-bevelled rim and receding sides. From Pit 1.

10. Fragment of a bowl of the N. B. P. Ware with a slightly-inturned externally-bevelled rim. From an early level of Phase B of Period I.

11. Fragment of a lid of the N. B. P. Ware with a truncated conical rim-base and a projection to fit in with a flanged vessel. From Phase A of Period I.

12. Fragment of a lid of the N. B. P. Ware with a splayed-out externally-clubbed rim-base and sharply-tapering sides. From an early level of Phase B of Period I. The position of this illustrated lid might as well be upside-down. It was drawn as per the rubbed surface at the edge.

13. Fragment of a vase (?) of the N. B. P. Ware with a flaring clubbed rim. From an early level of Phase B of Period I.

14. Fragment of a vase of the N. B. P. Ware with an out-turned clubbed rim and a conspicuous neck. From an early level of Phase B of Period I.

15. Fragment of a vase of the N. B. P. Ware with a drooping rim, externally undercut near the end. From an early level of Phase B of Period I.

16. Fragment of a vase of the N. B. P. Ware with a rounded rib at the junction of the neck and shoulder. From an early level of Phase B of Period I.

17. Fragment of a carinated *hāṇḍī* of the N. B. P. Ware with a closing featureless rim and a body sharply carinated to a rounded base. From an early level of Phase B of Period I.

(ii) *The black-and-red ware*

A very limited percentage of pottery is black-and-red, the entire interior and the outer surface of the rim of the pots, fired in an inverted position, being black due to the reducing conditions present in the fuel and the remaining outer surface red owing to oxidizing conditions. From the scanty sherds recovered from the excavation, it is difficult to determine whether the bicolour was accidental or the result of a deliberate technique. In case of the latter alternative, the technique appears to have been a dying one.

The few types of bowls, basins and vases represented by this ware are not peculiar to it alone, as copious examples of these shapes are met with in red and grey wares. The fabric is usually medium. The red portion of the vessels bears a red slip. With the exception of the lipped basins with inturned externally oval- and elliptical-collared rim and also of Type XLV (and its variants) of red and grey wares, all the determinable forms are illustrated on fig. 3.

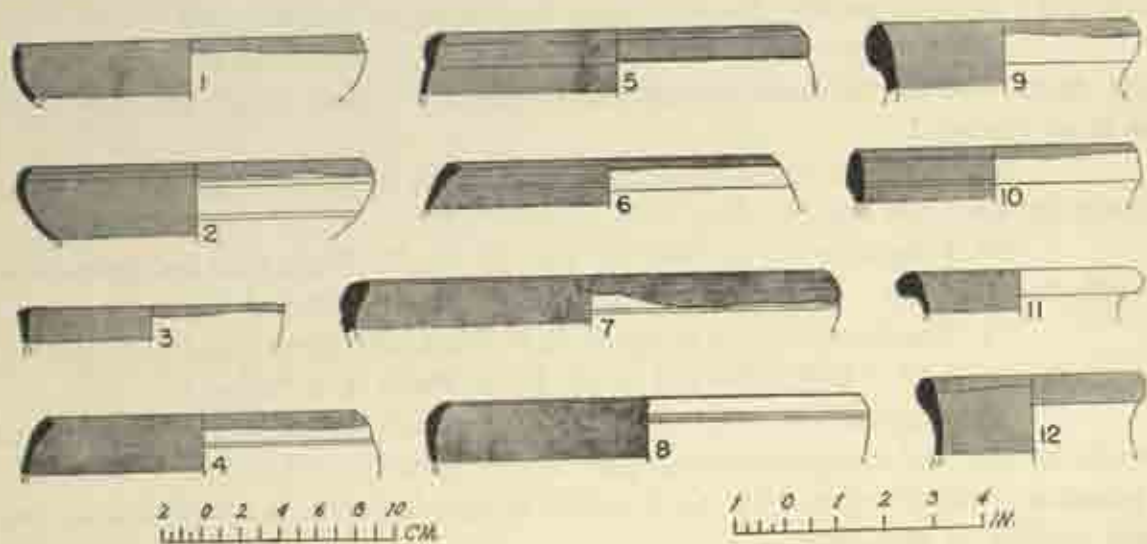


FIG. 3. Tilaura-kot: pottery from Period I (black-and-red ware)

1. Shallow bowl with a vertical tapering rim and convex sides. From Phase B of Period I.

2. Bowl with an incurved featureless rim and gradually-receding sides ending presumably in a rounded base. From the rampart-filling.

3. Deep bowl with a vertical thickened flat-topped rim. From the rampart-filling.
4. Deep globular bowl with a narrowing elliptical rim having a groove below on the outside. From Phase A of Period I.
5. Deep globular bowl with an inturned externally elliptical-collared rim having a depression on the inner side. From Pit 1.
6. Deep globular bowl with a narrowing bevelled rim. From Phase B of Period I.
7. Basin with an inturned externally-thickened and grooved rim and hemispherical profile. From Pit 1.
8. Deep and large bowl with a narrowing tapering rim having three grooves on the exterior. From Phase B of Period I.
9. Vase with an out-turned externally-thickened and ridged rim. From Phase A of Period I.
10. Vase with a vertical externally-thickened tapering rim. From Phase A of Period I.
11. Vase with an out-turned externally-thickened and undercut rim. From Phase A of Period I.
12. Vase with an out-turned externally-thickened rim. From Phase A of Period I.

(iii) Other wares

Apart from several specimens of the black-slipped ware, there are two ceramic industries, distinguished by their modes of firing: (a) the red ware and (b) the grey ware. Though sherds of red ware outnumber those of grey ware, the vessels in the latter ware are fairly prolific. Both the wares represent identical types in several shapes. The simultaneous use of these two wares copiously for utensils of daily use in hundreds of contemporaneous sites of northern India and the Nepalese Tarai suggests that both were manufactured in or in the immediate vicinity of the sites; the occurrence of a considerable percentage of grey ware in all these sites precludes the possibility of their importation from a common source. The question naturally comes up regarding the purpose and significance. The predilection of the comparatively-expensive grey ware, characterized by well-baked fabric, hardness and smooth surface, for dishes and small bowls—the dinner-set of the common people—meant to be cleaned daily, explains the utility of this ware. Did the same class of potters resort to the two different modes of firing to meet the needs and fancy of their clientele of different tastes? Or were these distinctions the hallmarks of different communities or castes as at present in the neighbouring parts of Tilaura-kot? In the former alternative the distinction had no particular significance other than utility. In the latter case definite social significance, apart from purpose, is involved.

RED WARE.—The great majority of the sherds of this ware is slipped; the colour of the slip is almost invariably red, the common shade being bright-red. The fabric is normally medium, though pots of fine fabric are by no means rare. Fashioned out of tolerably smooth paste, it is fairly well-burnt. There are, however, many sherds which have a grey core evidently due to indifferent firing.

Some of the sherds, presumably of vases, from both Phases of Period I, bear simple vertical or horizontal bands, painted in black with the utmost indifference (pl. XXIII A). Several sherds have small bands in red, brown or black on the inner face as well. While the bands on the outside appear to be deliberate, those inside are perhaps due to the trickling of the slip. On the body of two bowls of a specialized shape (fig. 9, *Type XLI*), which is typical of stone caskets, are found oblique strokes in buff.

Decorations other than the painted ones likewise formed a small percentage. Most frequent among these are mesh-like impressions (pl. XXIV A) which start usually below the neck and continue on the lower part of the body. Sometimes this design occurs at intervals. Stratified deposit of Phase A of Period I contains this pattern alone. Other decorations comprise: stamped triangles which produce a series of corresponding triangles in relief (pl. XXIV B, 1, 2 and 3); triangular notches either touching one another and presenting the effect of a set of continuous triangles (pl. XXIV B, 4) or placed at intervals (pl. XXV A, 19 and 25); oblong and roughly oval-shaped notches (pl. XXV A, 16); crescent-shaped notches (pl. XXV A, 23); elongated wedge-shaped (or nail-headed) notches, often arranged obliquely (pl. XXV A, 15, 18, 20, 21, 22 and 27), one of the variety of which has a raised oblique line inside each of such notches (pl. XXV A, 13); incised oblique, curved and crescent-shaped strokes (pl. XXV A, 14, 17, 24, 26 and 28); finger-nail incisions (pl. XXIV B, 5); incised wavy lines containing within oblique incisions (pl. XXIV B, 11); applied band with crescent-shaped decoration made by fingers (pl. XXIV B, 8); sets of oblique and vertical combings (pl. XXIV B, 7, 9, 10 and 12); and impression resembling tortoise-shell (pl. XXIV B, 6). With the exception of the last two motifs, all are invariably executed either on or immediately below the shoulder. Combings are noticed both on the shoulder and body.

Perforated sherds (pl. XXV B) occur in limited numbers in both the Phases of Period I. Most of these are too small to indicate the shape. While the vessels with large perforations, including *Type CLXXI* (fig. 22), might have been used as braziers, bowl-like vessels with small perforations at the base (fig. 22, *Type CLXXII*) were possibly intended as strainers.

With the exception of dish which is extremely rare in this ware, all the forms are found in much greater abundance than those of the grey ware save for bowls which are shared equally by both the wares. Used for multifarious purposes like cooking, storage, etc., vases of diverse forms and sizes preponderate over all other vessels, the bowls of varied shapes being next in number.

The other notable kinds of vessels, in order of frequency, are basins, lids, miniature *ghaṭas*, tumbler-like pots, deep and shallow frying-pans (*kaḍhāi* and *tawā*) and vessels-on-stands.

The common types in basins are *XLV*, *XLIX*, *L* and *LI* which are frequently lipped and evidently used for keeping and serving milk and liquid preparations.

All the types of lids are represented in red ware, the common types being *LXI*, *LXII*, *LXV*, *LXXIV*, *LXXV* and *LXXXI* with its variants. Some of the types could have been used in both ways, i.e. in the way shown in the drawings as also in the inverted position.

Miniature vases and *ghaṭas* are fairly common in both red and grey wares. On modern analogy it may be presumed that they variously served as ritual *ghaṭas*, drinking-pots, measuring-pots for liquid substance, ink-pots, toy-vases, etc.

Of the vessels-on-stands, stems with the lowest part of the vessels proper are alone met with. None of the sherds of this type of vessels is large enough to indicate the complete shape. The stem and the vessel are first prepared separately and then luted together.

Specialized forms are represented by *Types XLI*, *CLXVIII* and *CLXX*.

GREY WARE.—Fashioned out of a smooth paste of well-levigated clay and of fairly fine fabric, the grey ware is well-baked on the whole. The ware has normally a medium-thick section like the one from Period III of Hastināpura, though fine thin section is not altogether wanting, particularly in bowls. The core is generally ashy-grey and rarely blackish-grey. Most of the vessels were treated with a slip both internally and externally, the colour being either grey with shades varying from medium to dark grey or black, the latter largely restricted to some types of bowls and small *ghaṭas*. Several fragments, mostly of dishes, have a black interior and black-and-grey exterior, the black on the outside confined to the base; this may be due to the pots having been stacked one above the other in the kiln. The pots as a whole are plain. A few rare sherds alone, presumably of dishes, bear deep concentric grooves on the inner side of the base (fig. 6, A). Some of the sherds also evince bands, dots and strokes (pl. XXIII B) in black, but these paintings are of negligent execution.¹

The commonest kind of vessels in this ware is the dish, this form in red ware being exceptional. With various rims, the dishes have either flattened or convex bases. The sides usually curve towards the base, the dishes with carinated profile being rare. Evidently used as dining-plates (*ihālī*), they were found in abundance. The total disappearance of this essential type in earthenware, which was particularly the characteristic of this period, in Period IV of Hastināpura is perhaps significant. It is difficult to believe

¹ These indifferently-painted sherds found in association with the Northern Black Polished Ware cannot be assigned to a distinctly pre-N. B. P. Ware phase, but the possibility of finding classic examples of the Painted Grey Ware or of isolating its pre-N. B. P. Ware phase elsewhere, if not on the site, cannot be entirely ruled out.

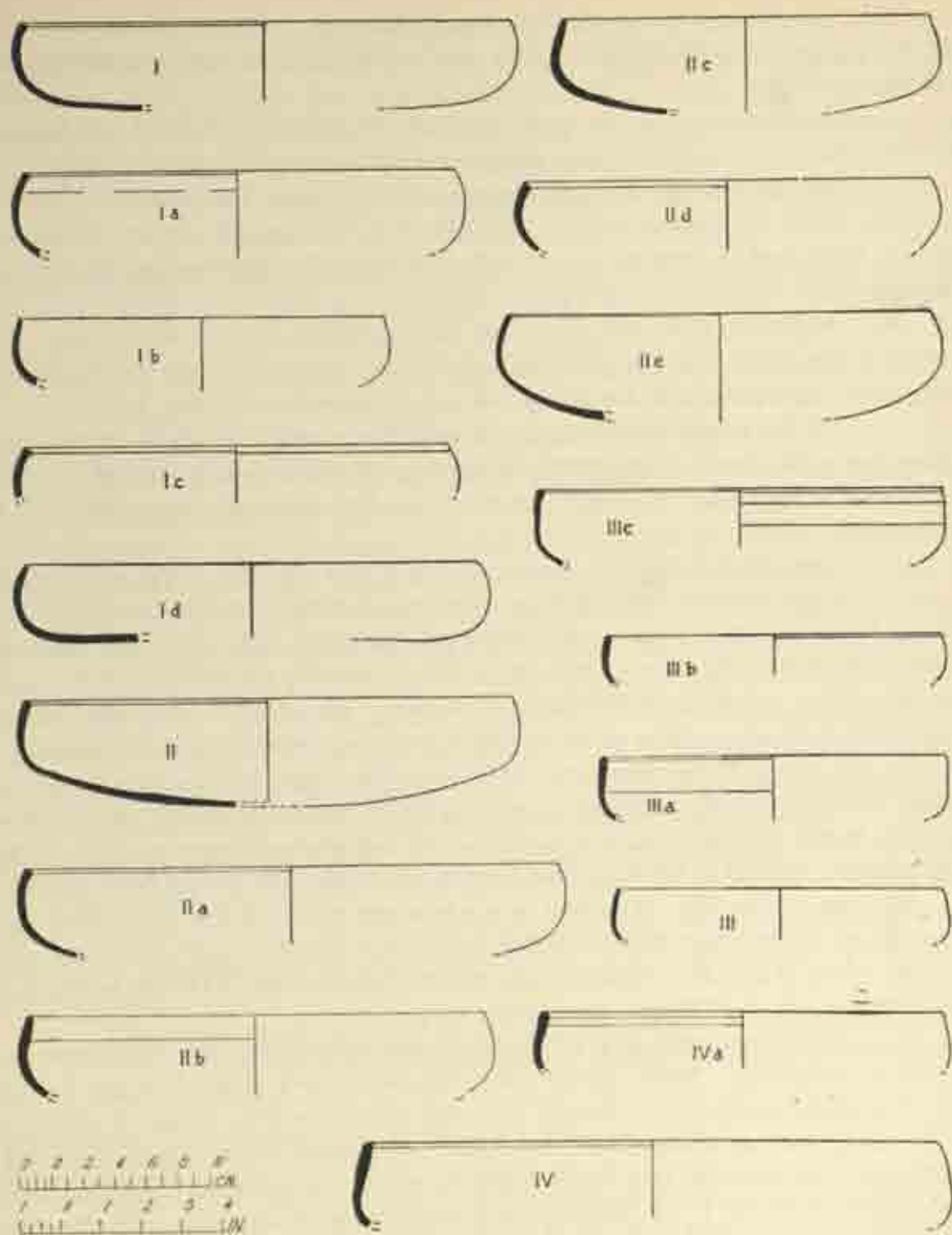


FIG. 4. Tilaura-kot: pottery from Period I (other wares)

that it is entirely due to the popularity of metal, as the latter did not oust the other earthen forms. On the analogy of the present-day practice,¹ can it be presumed that the belief that an earthen vessel from which cooked rice is taken becomes permanently *uchchhlshṭa* and has to be thrown away started working from this period onwards? If so, what was the cause of such a radical change in usage? Was it due, partly at least, to the absorption of foreigners, the latter's invasions and settlement in the country forming an important event of the period?

Bowls in this ware are as frequent as in the red ware and represent a wide variety of types. Indeed, all the types, except a few like *XXI*, *XXVIII* (with its variants), *XXXIII*, *XXXVIa* and *XXXVIb*, are met with.

Other forms, which are of limited occurrence, in order of frequency are small vases and *hāṇḍīs*, miniature *ghaṭas*, lids, basins, vessels-on-stands (not illustrated) and tumbler-like pots (*Type LXXXVI*), the last three being exceptional. Lids are limited to *Types LXVI*, variants of *LXVIII*, *LXIX*, *LXX* and *LXXI*. Basins are largely restricted to the collared variety, usually distinguished by a lip. The types represented by miniature vases and *ghaṭas* are *XCIII*, *XCIV*, *XCV*, *XCVI* with its variants, *XCVIIa*, *XCVIIb*, *XCIX* with its variant, *CIIa*, *CIII*, *CV* and *CVII*.

The following select types of other wares are illustrated on figs. 4-22.

Type I. Dish of grey ware with an inturned inconspicuously-thickened obliquely-bevelled rim and convex sides ending in a flat base. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. Dishes of this type with this rim are fairly common in both the Phases of Period I. *Variant Ia*, of grey ware, differs from the above in not having the rim thickened at the top. Of fine fabric, it is treated with a dark-grey slip, preserved only on the interior. From Pit 1. *Variant Ib*, of grey ware, differs from the main type in having a slightly-everted featureless rim. Of fine fabric, it is treated with a dark-grey slip. From an early level of Phase B of Period I. This type is somewhat analogous to *Type XVIII* from Period III of Hastināpura. *Variant Ic*, of grey ware, differs from the main type in having a groove below the rim on the exterior. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant Id*, of grey ware, differs from the main type in having an inturned featureless rim. Of fine fabric, it is treated with a dark-grey slip, mostly missing. From Pit 1.

Type II. Dish of black-and-grey ware with an inturned bevelled rim and convex sides curving to a convex base. Of fine fabric, it has a black slip on the interior and on the exterior surface of the base and grey slip on the exterior sides. From Pit 1. *Variant IIa* has an inconspicuous groove below the rim on the exterior. Of exceptionally smooth surface, fine fabric and pinkish core with grey patches, it has a bright-red slip, which has turned to brownish-grey externally at places. From Pit 1. *Variant IIb*, of grey ware, differs from the main type in having an inturned featureless rim and a weak ridge on the sides internally. Of fairly fine fabric, it is treated with a dark-grey slip. From an early level of Phase B of Period I. *Variant IIc*, of grey ware, differs from the main type in

¹ In an orthodox family of Bengal even glass and porcelain vessels are not used for taking cooked rice.

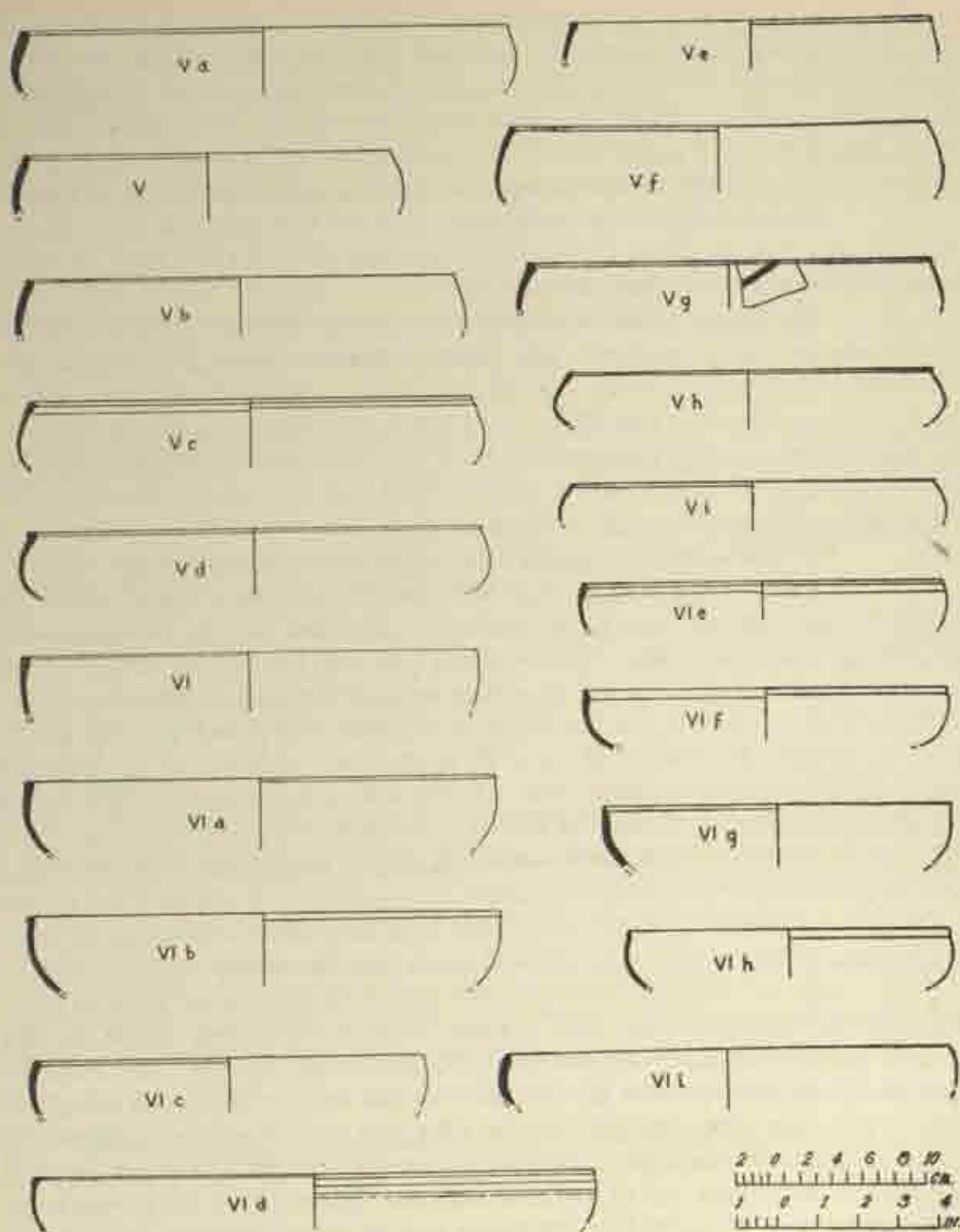


FIG. 5. Tilaura-kot: pottery from Period I (other wares)

having a closing featureless rim with a section thinner than that of the sides and conspicuously-convex sides. Of fine fabric, it is treated with a dark-grey slip. From an early level of Phase B of Period I. This type is analogous to *Type XXVII* from Period II of Hastināpura. *Variant IIa*, of red ware, differs from the main type in having a sharply-bevelled rim. Of medium fabric, it has a red slip which has turned black on the upper part of both the sides and rim. From Phase A of Period I. *Variant IIe*, of grey ware, differs from the main type in having a featureless rim. Of fine fabric, it is treated with a dark-grey slip. From Pit I.

Type III. Dish of grey ware with an inturned featureless rim and almost straight sides curving near the bottom. Of fine fabric, it is treated with a dark-grey slip. From Pit I. *Variant IIIa*, of grey ware, differs from the above in having a vertical rim, mildly bevelled internally. Of fine fabric, it is treated with a grey slip turned black internally and on the exterior surface of the base. From Phase A of Period I. *Variant IIIb*, of grey ware, differs from the main type in having an inconspicuous projection of the rim above the exterior sides. Of fine fabric, it is treated with a dark-grey slip. From Phase A of Period I. *Variant IIIc*, of blackish-grey ware, is distinguished from the main type by an inturned externally-thickened rim and prominent striations on the exterior sides. Of fine fabric, it preserves a black slip. From Pit I.

Type IV. Dish of dark-grey ware with a slightly-inturned featureless rim and gradually-expanding sides curving abruptly near the base. Of medium fabric, it presents a black slip. From Pit I. *Variant IVa*, of grey ware, differs from the above in having the rim mildly thickened and chamfered internally. Of medium fabric, it preserves a black slip. From Pit I.

Type V. Dish of grey ware with an inturned partly obliquely-bevelled rim having an inconspicuous groove externally, and sides, first gradually widening almost in a straight line down to the mid-portion and then curving inwards. Of fine fabric, it is treated with a dark-grey slip. From Pit I. *Variant Va*, of a smoky-red core, varies from the above in having the rim inconspicuously thickened externally and sides gradually thinning. Of fine fabric, it has a dull-red slip externally and a grey slip internally. From Pit I. *Variant Vb*, of red ware, differs from the main type in not having the groove. Of medium fabric, it has a red slip externally and a black slip internally. From Phase A of Period I. *Variant Vc*, of grey ware, differs from the main type in having an internally-thickened and-bevelled and externally-beaded rim and gradually-thinning sides with an interior groove near the top. Of fine fabric, it is treated with a dark-grey slip. From Pit I. *Variant Vd*, of fine grey ware, differs from the main type in having an inturned externally-thickened rim and gradually-thinning sides. Of fine fabric, it is treated with a dark-grey slip. From Phase A of Period I. *Variant Ve*, of fine grey ware, differs from the main type in having a vertical inconspicuously nail-headed rim. Of fine fabric, it has a black slip on the interior and rim and a grey slip on the available part of the exterior. From Phase A of Period I. *Variant Vf*, of blackish-grey ware, differs from the main type in

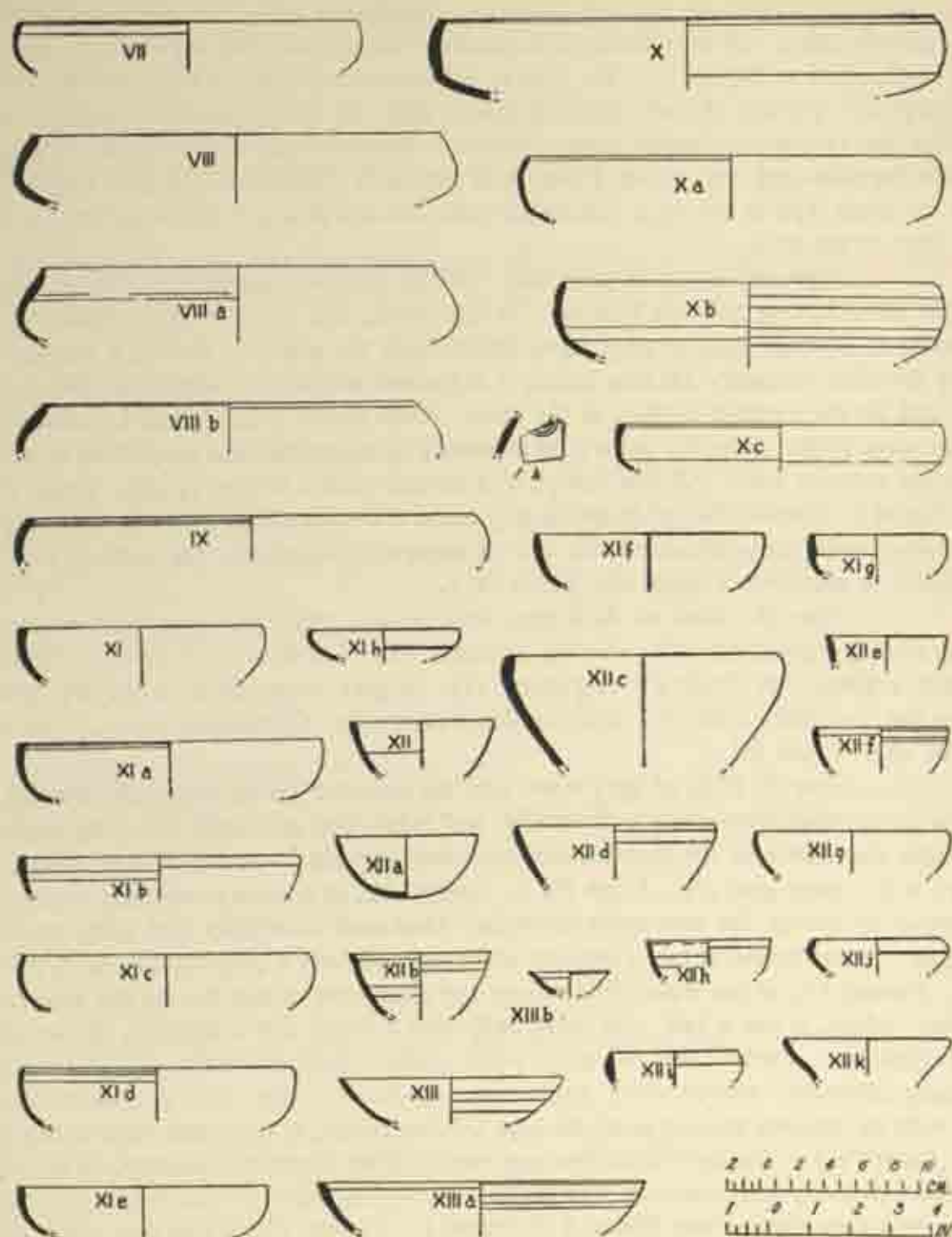


FIG. 6. Tilaura-köt: pottery from Period I (other wares)

having an inturned inconspicuously nail-headed rim and gradually-thinning sides. Of fine fabric, it preserves a black slip. From Phase A of Period I. *Variant Vg*, of grey ware, is somewhat similar to *Variant Vd*, but it has an oblique band in black on the exterior surface. Of fine fabric, it has a grey slip externally and a black slip internally. From Phase A of Period I. *Variant Vh*, of fine grey ware, differs from the main type in having an externally-thickened rim and a bulging body. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant Vi*, of fine grey ware, differs from the main type in having an internally-beaded rim. Of fine fabric, it is treated with a grey slip. From Phase A of Period I.

Type VI. Deep dish of grey ware with an almost vertical flatly-bevelled rim and mildly-convex sides, gradually narrowing and thinning towards the bottom. Of fine fabric, it preserves a black slip. From Phase A of Period I. *Variant Via*, of grey ware, differs from the above in having the rim externally thickened. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant Vih*, of grey ware, is somewhat similar to the preceding, but its rim is prominently thickened externally with a depression underneath. Of fine fabric, it is treated with a grey slip, preserved partly on the exterior. From Phase A of Period I. *Variant Vic*, of grey ware, differs from the main type by an inturned obliquely-bevelled rim. Of fine fabric, it has a light-grey slip externally and a blackish-grey slip internally. From Phase A of Period I. *Variant Vid*, of blackish-grey ware, differs from the main type in having an inconspicuously nail-headed rim. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant Vle*, of grey ware, differs from the main type in having an inturned internally-bevelled and externally-thickened rim with a groove below. Of fine fabric, it is treated with a light-grey slip. From Phase A of Period I. *Variant Vlf*, of black-and-grey ware, differs from the main type in having an everted internally-thinned rim. Of fine fabric, it has a grey slip on the exterior, the interior being black. From Pit 1. *Variant Vlg*, of red ware, differs from the main type in having an everted featureless rim. Of coarse fabric, it presents a red slip. From Phase A of Period I. *Variant Vlh*, of black-and-grey ware, differs from the main type in having a vertical internally-thinned and externally-grooved rim and a somewhat globular profile. Of fine fabric, it has a grey slip on the extant exterior and a black slip on the interior. From Pit 1. *Variant VII*, of grey ware, differs from the main type in having an inturned featureless rim. Of medium fabric, it presents a black slip. From Phase A of Period I.

Type VII. Shallow dish of grey ware with an inturned partially-bevelled rim having a groove below on the inner side and convex sides narrowing towards a presumably flat base. Of fine fabric and ashy-grey colour, it is treated with a dark-grey slip. From Pit 1.

Type VIII. Dish of red ware with a closing featureless rim and a bulging pear-shaped profile. Of medium fabric, it has a bright-red slip which has turned black on the upper part of both the sides. From Phase B of Period I. *Variant VIIIa*, also of red ware, differs from the above in having an everted thinning rim. Of medium fabric, it

has a bright-red slip. From Pit 1. *Variant VIIIb*, of grey ware, differs from the main type in having a partially-bevelled rim with a groove below on the outer side. Of fine fabric, it is treated with a dark-grey slip. From Phase B of Period I.

Type IX. Dish of grey ware with an incurved internally-beaded rim having a groove on the top and a globular profile. Of fine fabric, it is treated with a dark-grey slip. From Phase A of Period I.

Type X. Dish of grey ware with an inturned slightly externally-chamfered rim and a blunt carination near the junction of the sides and base. Of thick but fairly fine fabric and ashy-grey colour, it is now devoid of any slip. From Pit 1. This form is analogous to *Type XXVa* from Period II of Hastināpura. Carinated dishes are extremely rare. *Variant Xa*, of grey ware, differs from the above in having a featureless rim and an imperfect carination. Of fine fabric, it is treated partially with a grey slip. From Phase A of Period I. *Variant Xb*, of black-and-grey ware, differs from the main type in having a featureless rim, parallel grooves on the sides and a less-pronounced carination. The entire interior and the bottom of the exterior are black. There is no trace of any slip at present. From Phase A of Period I. *Variant Xc*, of black-and-grey ware, differs from the main type in having an internally-bevelled rim and gradually-thinning sides. Of fine fabric, it has a grey slip on the extant sides of the exterior and a black slip on the interior. From Pit 1.¹

Type XI. Shallow bowl of grey ware with a vertical featureless rim, incurved sides and presumably a flat base. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant XIa*, of grey ware, differs from the above in having an internally-thickened rim. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XIb*, of grey ware, differs from the main type in having an inconspicuously out-turned rim with a groove on the outer side. Of fine fabric, it is treated with a dark-grey slip. From Phase B of Period I. *Variant XIc*, of fine grey ware, differs from the main type in having an inturned rim with an inconspicuous groove on the exterior. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XId*, of grey ware, differs from the main type in having an inturned internally-bevelled rim and grooves on the inner side of the body. Of fine fabric, it has a black slip. From Pit 1. *Variant XIe*, of grey ware, differs from the main type in having an inconspicuously-everted featureless rim. Of fine fabric, it is treated with a grey slip externally. From Phase A of Period I. *Variant XIf*, of grey ware, differs from the main type in having a tapering rim. Of fine fabric, it has a black slip. From Phase A of Period I. *Variant XIg*, of grey ware, differs from the main type in having a weak rib internally. Of medium fabric and devoid of any slip, it is somewhat analogous to *Type XIV* from Period III of Hastināpura. From Pit 1. *Variant XIh*, of grey ware, differs from the main type in having an incurved rim and a prominent groove on the body. Of fine

¹ Number A of Fig. 6 is the fragment of the base of a dish of grey ware, showing deep concentric grooves (Pit 1). It could not be associated with any type due to the missing bodily features.

fabric, it presents a black slip. From Pit 1. This type of bowls, the larger specimens of which somewhat resemble dishes, is usually restricted to grey ware.

Type XII. Deep bowl of dull-red ware with an out-turned featureless rim, gradually-narrowing sides and presumably a flattish base. Of medium fabric, it presents a red slip. From Phase B of Period I. *Variant XIIa*, of red ware, differs from the above by its bluntly-sharpened rim. Of fine fabric and with black patches due to indifferent firing, it preserves a bright-red slip. From Pit 1. *Variant XIIb*, of red ware, differs from the main type in having an internally-bevelled rim and inconspicuous grooves on the body. Of medium fabric, it presents a red slip. From Pit 1. *Variant XIIc*, of red ware, differs from the main type by an inturned rim. Of medium fabric, it is provided with a bright-red slip. From Phase B of Period I. *Variant XIId*, of dull-red ware, differs from the main type by its externally-bevelled rim. Of fine fabric and with black patches due to indifferent firing, it is provided with a bright-red slip. From Phase B of Period I. *Variant XIIe*, of grey ware, differs from the main type by a mildly-everted rim. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant XIIf*, of grey ware, differs from the main type by an inturned internally-thickened rim with a groove below on both sides. Of fine fabric, it preserves a black slip. From Pit 1. *Variant XIIg*, of fine grey ware, differs from the main type by an incurved rim and an inconspicuous groove on the body. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant XIIh*, of grey ware, differs from the main type by an inconspicuously-bevelled rim and grooves on the body. Of fine fabric, it presents a black slip. From Pit 1. *Variant XIIi*, of grey ware, differs from the main type by a vertical externally-bevelled rim. Of fine fabric, it preserves a black slip. From Phase B of Period I. *Variant XIIj*, of grey ware, differs from the main type by an incurved rim with a deep groove below. Of fine fabric, it presents a black slip. From Pit 1. *Variant XIIk*, of grey ware, differs from the main type in having a depression near the waist. Of fine fabric, it is treated with a dark-grey slip. From Pit 1.

Type XIII. Shallow bowl of dull-red ware with an out-turned featureless rim, receding sides and grooves on the body. Of fine fabric and with black patches due to indifferent firing, it bears a bright-red slip. From Phase B of Period I. *Variant XIIIa*, of dull-red ware, differs from the above by an internally-bevelled rim. Of medium fabric and with black patches due to indifferent firing, it presents a red slip. From Phase B of Period I. *Variant XIIIb*, of grey ware, differs from the main type by a splayed-out rim. Of fine fabric, the miniature bowl preserves a black slip. From Phase A of Period I.

Type XIV. Deep bowl of dull-red ware with a vertical internally-thinned rim, an inconspicuous depression below the rim and a globular profile. Of medium fabric, it has a dark-red slip. From Pit 1. *Variant XIVa*, of grey ware, differs from the above by an internally-beaded rim. Of fine fabric, it preserves a black slip. From

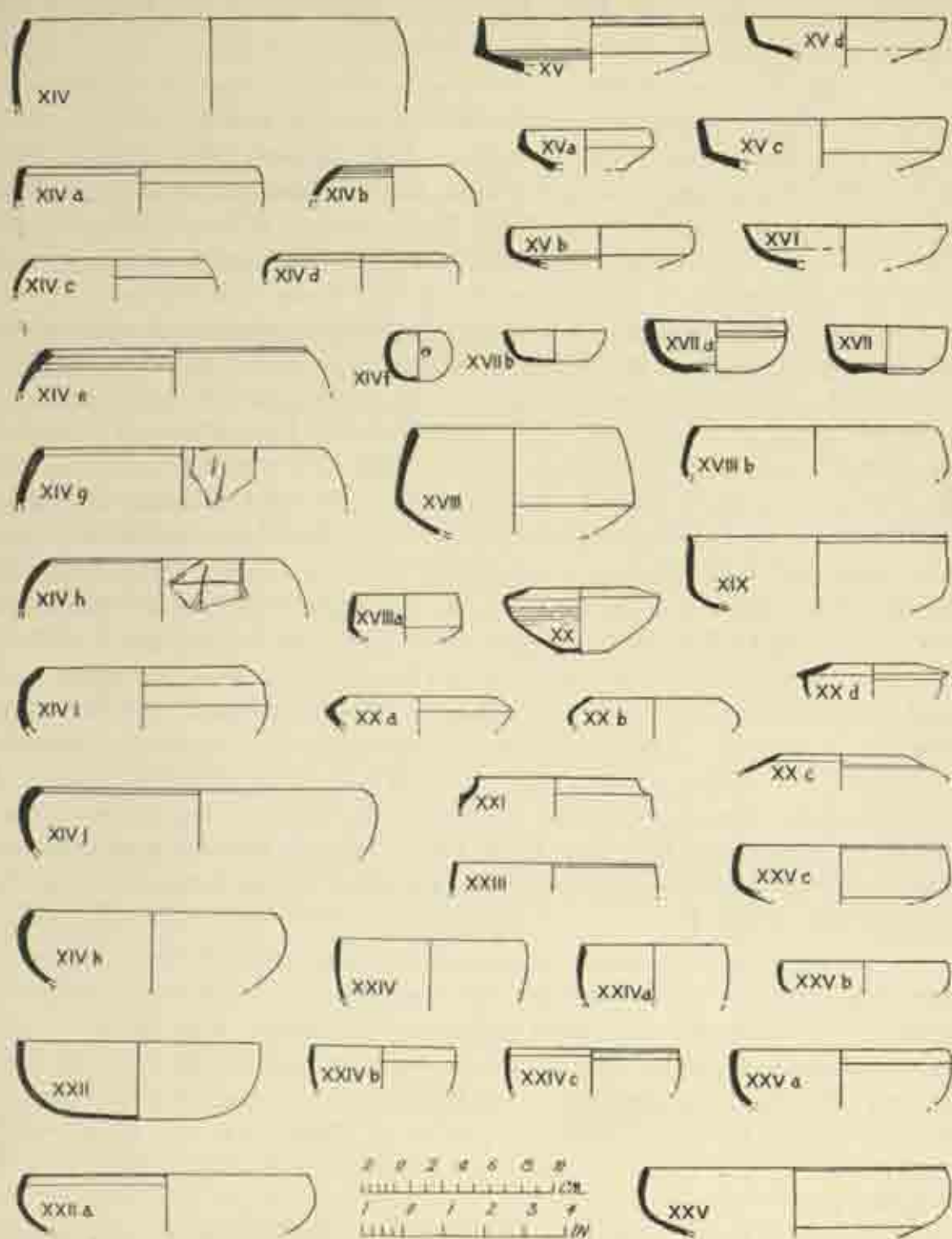


FIG. 7. Tilaura-kot: pottery from Period I (other wares)

Phase A of Period I. *Variant XIVb*, of grey ware, differs from the main type in having a narrowing featureless rim and a few inconspicuous grooves on the inner side. Of fine fabric, it presents a black slip. From Pit 1. *Variant XIVc*, of fine grey ware, differs from the preceding by a tapering rim and a groove on the exterior body, the interior being plain. Of exceptionally fine fabric and ashy-grey colour, it is devoid of any slip. From Pit 1. *Variant XIVd*, of grey ware, has an abruptly-narrowing internally-thinned rim. Of fine fabric, it has a black slip. From Pit 1. *Variant XIVE*, of dull-red ware, differs from the main type by an inturned internally-thickened and obliquely-bevelled rim. The upper part of its body is inconspicuously ribbed. Of medium fabric, it is provided with a red slip externally. From Phase A of Period I. *Variant XIVf*, of dull-red ware, is a miniature bowl with a flat base, similar in form to the extant part of *Type XIVb*. Without any grooves, it has a single perforation on its body. Of fine fabric, it presents a bright-red slip. From Pit 1. *Variant XIVg*, of blackish-grey ware, differs from the main type by an inturned internally-bevelled rim. It bears on its body two slightly-slanting incised marks (pl. XXII, 6; p. 17). Of medium fabric, it preserves a black slip. From Pit 1. *Variant XIVh*, of grey ware, differs from *Variant XIVb* by the absence of grooves and the presence of a graffito (pl. XXII, 2; p. 17) in the form of a cross with two oblique strokes emerging from the lower part of a vertical line. Of fine fabric, it is treated with a dark-grey slip externally. From Phase B of Period I. *Variant XIVI*, of red ware, differs from the main type in its having a closing featureless rim and inconspicuously-corrugated sides. Of medium fabric, it has a deep-red slip. From Phase B of Period I. *Variant XIVj*, of red ware, differs from the main type by its incurved obliquely-bevelled rim. Of coarse fabric, it is devoid of any slip. From Pit 1. *Variant XIVk*, of grey ware, has an incurved internally-thinned rim. Of fairly fine fabric and with red patches on the upper face of the core, it is provided with a blackish slip. From Phase B of Period I.

Type XV. Bowl of dull-red ware with a vertical featureless rim having a groove below on the outer side and a body almost straight down to the middle part where it, with a sharp carination, recedes towards the base in an oblique line. The inner sides bear wheel-marks. Of fine fabric and with grey patches in the core, it is provided with a dark-red slip externally. From Pit 1. *Variant XVa*, of grey ware, differs from the above by its bluntly-sharpened rim. Its button-base bears marks of the cutting-thread. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XVb*, of fine grey ware, differs from the main type by its somewhat inturned rim and a blunt carination. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XVc*, of dull-red ware, has a prominently out-turned rim, mildly bevelled externally. Of medium fabric, it has a red slip. From Pit 1. *Variant XVd*, of dull-red ware, differs from the preceding by its featureless rim and a blunt carination. Of medium fabric, it preserves a bright-red slip. From Pit 1.

Type XVI. Bowl of red ware with an out-turned featureless rim and receding sides mildly carinated to a convex base. Of medium fabric, it is devoid of any slip. From Pit 1.

Type XVII. Small bowl of grey ware with a vertical internally-sharpened rim and almost straight sides taking a sharp curve towards the inconspicuous button-base, with marks of the cutting-thread. Of fine fabric, it preserves a black slip. From Pit 1. *Variant XVIIa*, of grey ware, differs from the above by its out-turned externally-bevelled rim with a prominent groove below and curved sides. Of medium fabric, it has a black slip. From Pit 1. *Variant XVIIb*, of grey ware, differs from the main type by its out-turned tapering rim and receding sides. Of fine fabric, it is provided with a black slip. From Pit 1.

Type XVIII. Deep bowl of blackish-grey ware with an inturned obliquely-bevelled rim and progressively-widening sides sharply carinated towards a presumably rounded base. Of medium fabric, it is provided with a black slip. From Pit 1. *Variant XVIIIa*, of dull-red ware, differs from the above by its featureless rim, less tapering sides and a rib on the carination. Of medium fabric, it has a red slip. From Phase B of Period I. *Variant XVIIIb*, of grey ware, differs from the main type by a groove below the rim on the exterior and a blunt carination. Of fine fabric, it is treated with a grey slip which has turned almost black on the inner side. From Pit 1.

Type XIX. Bowl of dull-red ware with an everted featureless rim, straight sides curving towards a flattened base. Of medium fabric, it has a dark-red slip. From Phase B of Period I.

Type XX. Carinated bowl of red ware with a closing internally-sharpened rim and a shoulder carinated to sides which gradually recede towards a button-base, the last with marks of the cutting-thread. Of fine fabric, it has a deep-red slip. From Pit 1. *Variant XXa*, of grey ware, differs from the above by the pointed carination. Of fine fabric, it is devoid of any slip. From Pit 1. *Variant XXb*, of grey ware, differs from the main type by its featureless rim and a blunt carination. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant XXc*, of red ware, differs from the main type by its internally-bevelled rim and a groove on the shoulder. Of fine fabric, it has a darkish-brown slip. From Phase A of Period I. *Variant XXd*, of fine grey ware, distinguishes itself by a prominent ledge on the carination. Of fine fabric, it is treated with a grey slip externally. From Pit 1.

Type XXI. Bowl of dull-red ware with a slightly out-turned featureless rim, a concave neck and a triangular rib on the shoulder. Of fairly fine fabric, it has a bright-red slip. From Pit 1.

Type XXII. Bowl of grey ware with a vertical featureless rim and sides gradually curving to a flattened base. Of fine fabric, it is provided with a black slip. From Pit 1. *Variant XXIIa*, of grey ware, differs from the above by its inturned

rim with an inconspicuous depression in the middle. Of fine fabric, it is provided with a black slip. From Pit 1.

Type XXIII. Bowl of fine grey ware with a vertical externally-undercut rim and almost straight sides. Of fine fabric, it is treated with a grey slip. From Pit 1. This type is extremely rare.

Type XXIV. Deep bowl of fine grey ware with a vertical featureless rim and inconspicuously-convex sides. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XXIVa*, of grey ware, differs from the above by an inturned obliquely-bevelled rim. Of fairly fine fabric, it has a black slip. From Pit 1. *Variant XXIVb*, of fine grey ware, differs from the main type by its internally-sharpened rim and a rib on the outer body. Of fine fabric, it is treated with a grey slip. From Pit 1. *Variant XXIVc*, of grey ware, is distinguished from the main type by its grooves. Of fine fabric, it is devoid of any slip. From Phase A of Period I.

Type XXV. Bowl of grey ware with an inturned rim, inconspicuously beaded externally, and sides curving to a convex base. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant XXVa*, of grey ware, differs from the above by an almost vertical externally-thinned rim with a groove below. Of fine fabric, it is treated with a light-grey slip. From Pit 1. *Variant XXVb*, of fine grey ware, differs from the main type by a vertical bluntly-sharpened rim. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant XXVc*, of blackish-grey ware, differs from the main type by its inturned featureless rim. Of medium fabric, it is provided with a blackish slip. From Pit 1.

Type XXVI. Bowl of red ware with a vertical externally-thinned rim and body curving towards a rounded base. Of medium fabric, it presents a bright-red slip. From Pit 1. *Variant XXVIa*, of grey ware, has a slightly-inturned internally-thinned rim. Of fairly fine fabric, it preserves a black slip. From Pit 1. *Variant XXVIb*, of red ware, differs from the preceding by its narrowing rim. Of medium fabric, it has a bright-red slip. From Pit 1. *Variant XXVIc*, of grey ware, is similar to the preceding but distinguished by a graffito (pl. XXII, 5; p. 17). Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant XXVId*, of grey ware, differs from the main type by an inturned internally-thickened rim. Of fairly fine fabric, it has a black slip. From Pit 1. *Variant XXVIe*, of red ware, differs from the main type by its narrowing obliquely-bevelled rim. Of medium fabric, it presents a bright-red slip. From Phase B of Period I. *Variant XXVIf*, of fine grey ware, differs from the main type by its sharpened rim. Of fine fabric, it preserves a black slip. From Phase A of Period I. *Variant XXVIg*, of fine grey ware, has a slightly-inturned flatly-bevelled rim. Of fine fabric, it is treated with a grey slip. From Phase A of Period I.

Type XXVII. Bowl of fine grey ware with a vertical tapering rim, an almost semicircular profile and an inconspicuous button-base with marks of the cutting-thread.

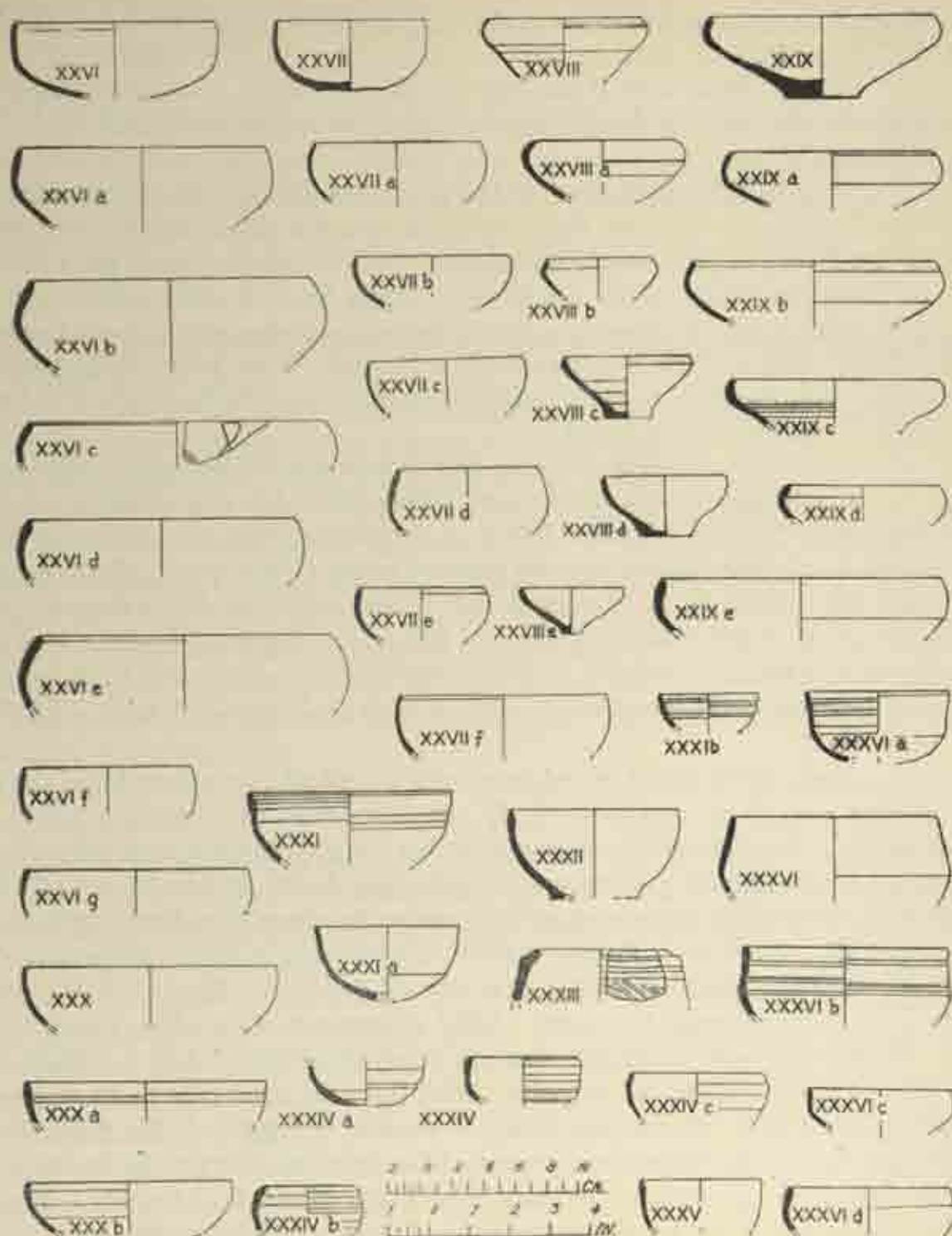


FIG. 8. Tilaura-kot: pottery from Period I (other wares)

Of fine fabric, it is treated with a grey slip. From Phase A of Period I. This type along with its variants, usually in fine grey ware, is fairly common. *Variant XXVIIa*, of fine grey ware, has an incurved featureless rim. Of fine fabric, it is treated with a light-grey slip. From Phase A of Period I. *Variant XXVIIb*, of fine grey ware, has a mildly-everted thinning rim. Of fine fabric, it is treated with a light-grey slip. From Pit 1. *Variant XXVIIc*, of fine grey ware, is similar to the preceding, but the rim is pointed. Of fine fabric, it has a black slip. From Pit 1. *Variant XXVIIId*, of grey ware, differs from the main type by a narrowing internally-thinned rim and a bulging profile. Of fine fabric, it preserves a black slip. From Phase A of Period I. *Variant XXVIIe*, of grey ware, has a slightly-inturned bluntly-pointed rim and a groove on the outer side. Of fine fabric, it is treated with a dark-grey slip. From Pit 1. *Variant XXVIIIf*, of grey ware, has an inturned mildly-bevelled rim with a groove below. Of fine fabric, it is treated with a dark-grey slip. From Phase A of Period I.

Type XXVIII. Bowl of red ware with an incurved featureless rim and gradually-narrowing sides, presumably ending in a button-base. Of fine fabric, it is devoid of any slip. From Pit 1. This type of bowls of red ware, along with some of its variants, is associated with the Northern Black Polished Ware in many sites. *Variant XXVIIIa*, of red ware, has a closing tapering rim having a groove below on the outer side. Of medium fabric, it presents a bright-red slip. From Phase B of Period I. *Variant XXVIIIb*, of red ware, differs from the main type in having an internally-sharpened rim. Of fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant XXVIIIc*, of red ware, has a vertical externally-bevelled rim and a button-base with the marks of the cutting-thread. Of fairly fine fabric, it is devoid of any slip. From Phase B of Period I. *Variant XXVIIIId*, of red ware, with its vertical featureless rim and button-base with thread-marks, is similar to *Type I* from Period III of Hastināpura. Of fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant XXVIIIe*, of red ware, differs from the preceding by its out-turned rim. Of fairly fine fabric, it is devoid of any slip at present. From Phase B of Period I.

Type XXIX. Bowl of grey ware with an incurved featureless rim and sides fastly receding to a button-base with thread-marks. Of fairly fine fabric, it presents a black slip. From Pit 1. While the preceding type, with which it is somewhat analogous, is usually restricted to red ware, this type generally is in grey ware. *Variant XXIXa*, of grey ware, differs from the above by its internally-sharpened rim with a groove on the outer side. Of fairly fine fabric, it presents a black slip. From Pit 1. *Variant XXIXb*, of grey ware, differs from the main type by a deep groove below the rim. Of fairly fine fabric, it preserves a black slip. From Pit 1. *Variant XXIXc*, of dull-red red ware, differs from the main type by a depression on the middle part. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant XXIXd*, of grey ware, differs from the main type by its internally-thickened rim. Of fairly fine fabric, it is devoid of any slip.

From Pit 1. *Variant XXIXe*, of red ware, differs from the main type by its internally-bevelled rim. Of medium fabric, it is devoid of any slip. From Pit 1.

Type XXX. Bowl of grey ware with a slightly-inturned internally-sharpened rim and convex sides. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant XXXa*, of red ware, has an out-turned externally-beaded rim and a prominent groove on the body. Of fairly fine fabric, it preserves a red slip. From Phase A of Period I. *Variant XXXb*, of red ware, has an almost vertical featureless rim and inconspicuous grooves on the body. Of fairly fine fabric, it presents a red slip. From Phase A of Period I.

Type XXXI. Bowl of dull-red ware with an out-turned externally-beaded rim and gradually-narrowing sides with prominent corrugations. Of medium fabric, it is devoid of any slip. From Pit 1. *Variant XXXIa*, of red ware, differs from the above by its featureless rim and inconspicuous corrugations. Of medium fabric, it presents a red slip. From Pit 1. *Variant XXXIb*, of red ware, differs from the main type by its featureless rim. Of medium fabric, it is devoid of any slip. From Pit 1.

Type XXXII. Deep bowl of smoky-red core with a mildly-inturned internally-bevelled rim and convex sides gradually receding to a button-base. Of medium fabric, it presents a dark-red slip. From Phase B of Period I.

Type XXXIII. Deep bowl of red ware with a closing featureless rim, below which is a flange possibly to receive the lid. On the upper part of the body are grooves, below which is a row of oblique incisions. Of medium fabric, it has a red slip which has turned black at places. From Phase B of Period I.

Type XXXIV. Small bowl of grey ware with a mildly-inturned featureless rim and an almost vertical corrugated body curving to a flat base. Of fine fabric, it presents a black slip. From Pit 1. *Variant XXXIVa* is the lower part of a corrugated bowl of grey ware with thread-marks on the base. Of fine fabric, it has a black slip. From Pit 1. *Variant XXXIVb*, of grey ware, has an inturned internally-thinned rim and a globular profile. Of fine fabric, it presents a black slip. From Pit 1. *Variant XXXIVc*, of fine grey ware, has a mildly-everted featureless rim and a convex profile. Of fine fabric, it has a black slip. From Phase A of Period I.

Type XXXV. Deep bowl of red ware with a vertical doubly-bevelled pointed rim and inconspicuously-convex sides. Of medium fabric, it presents a red slip. From Phase B of Period I.

Type XXXVI. Deep bowl of red ware with a mildly-inturned featureless rim and sides, first expanding down to the middle in a straight oblique line and then receding also in an oblique line with a resultant ridge at the junction. Of medium fabric, it is devoid of any slip. From Pit 1. *Variant XXXVIa*, of red ware, differs from the above by its almost vertical internally-beaded rim and the upper part of the body below the ridge first out-turned and then almost vertical. There are prominent grooves on the body. Of

fine fabric, it presents a bright-red slip. From Pit 1. *Variant XXXVib*, of red ware, differs from the main type by its vertical internally-thinned rim, prominent grooves and a mid-rib on the body. Of fine fabric, it preserves a bright-red slip. From Pit 1. *Variant XXXVic*, of red ware, differs from the main type by its vertical internally-thinned rim and vertical upper part of the body. Of medium fabric, it has a bright-red slip. From Phase A of Period I. *Variant XXXVId*, of dull-red ware, differs from the main type by not having a sharp junction. Of medium fabric, it has a dark-brownish slip. From Phase B of Period I.

Type XXXVII. Deep bowl of grey ware with a closing rim having a groove below on the exterior and a globular profile. Of fine fabric, it is externally grey and internally black and devoid of any slip. From Pit 1. *Variant XXXVIIa*, of grey ware, differs from the above in having a narrowing rim and an inconspicuous ridge below the groove. Of fine fabric, it has a black slip externally. From Phase B of Period I.

Type XXXVIII. Bowl of red ware with a narrowing obliquely-bevelled rim having a groove below on the exterior and receding sides gradually curving towards a presumably rounded base. Of fine fabric, it is devoid of any slip. From Pit 1. *Variant XXXVIIIa*, also of red ware, differs from the above by its internally-beaded rim. Of fine fabric, it is devoid of any slip. From Pit 1.

Type XXXIX. Shallow bowl of grey ware with an inturned featureless rim and sides curving towards a convex base. Of fine fabric, it is treated with a blackish-grey slip. From Pit 1.

Type XL. Lipped bowl of grey ware with an inturned sharpened rim, convex sides and presumably a flat base. Of fine fabric, it presents a black slip. From Pit 1. *Variant XLa*, of grey ware, differs from the above by its incurved featureless rim, a groove below the rim on the exterior and a globular profile. Of fine fabric, it preserves a black slip. From Pit 1. *Variant XLb*, of grey ware, is distinguished from the main type by its closing featureless rim. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant XLc*, of grey ware, differs from the main type in having an almost vertical featureless rim with a deep groove below. Its body is hemispherical. Of fine fabric, it is devoid of any slip. From Pit 1. *Variant XLd*, of red ware, differs from the main type in having a beaded rim, grooves on the inner side and a body bluntly carinated to a rounded base. Of fine fabric, it presents a bright-red slip. From Pit 1. Though these small bowls with their lips present the appearance of lamps, they do not preserve the slightest trace of any oil or burning. Most probably they were used as children's feeding-bowls.¹

Type XLI. Casket of red ware with a slightly-inturned featureless rim, a flange below the rim, a highly-projected ledge near the lower part of the body and presumably a convex base. The close-fitting lid has also a ledge. Of fine fabric, both the pieces

¹ Almost similar feeding-vessels, in metal, are in use in Bengal.

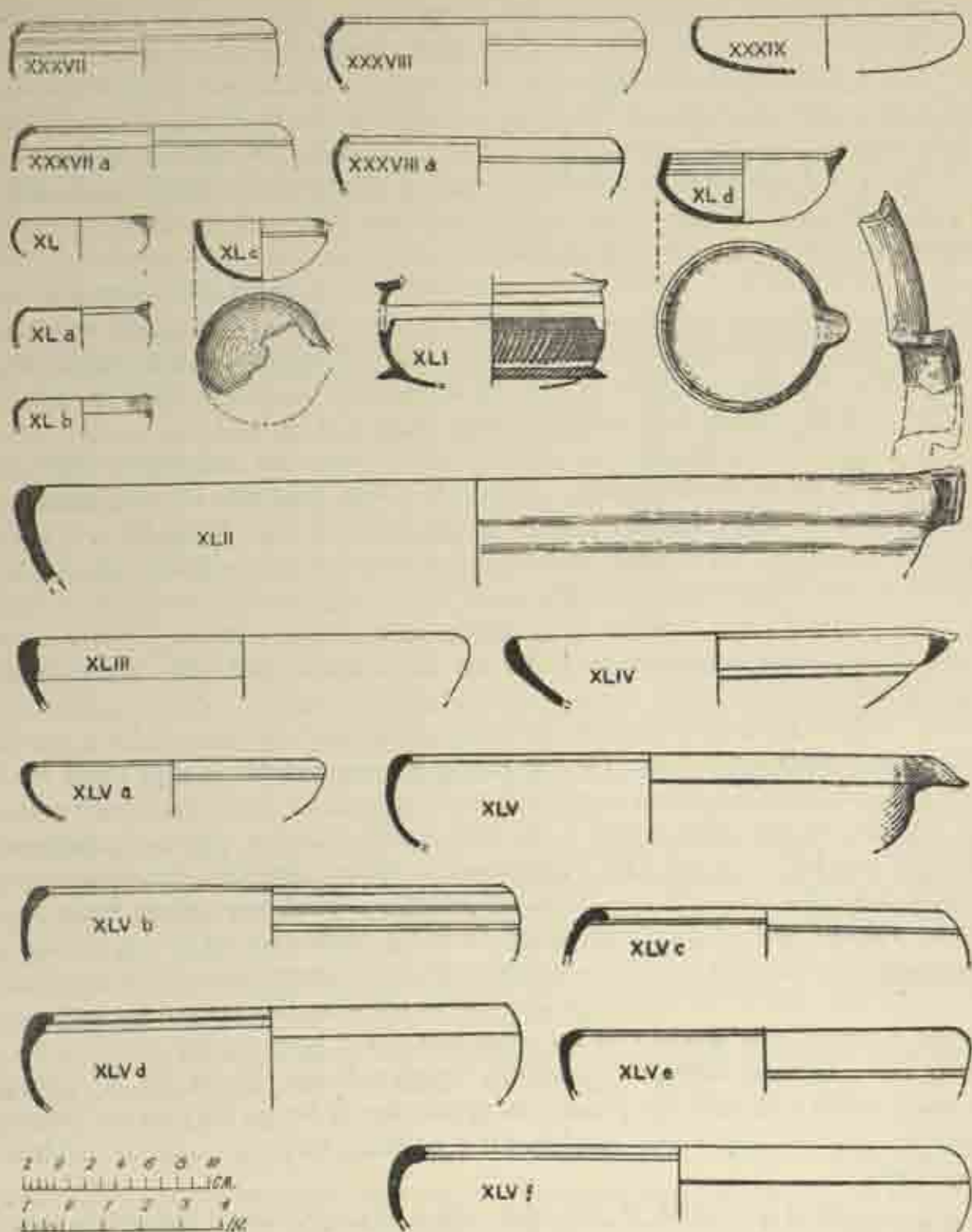


FIG. 9. Tilaura-kot: pottery from Period I (other wares)

are provided with a deep-brown slip which is absent on the base and inner side of the lid. The body and the upper surface of the ledge of the lower piece are painted in buff with oblique strokes. From Phase B of Period I. A steatite casket of analogous shape was found inside the main *stūpa* of Piprahwa.¹ Two specimens alone of this type were found in the excavation.

Type XLII. Basin of dull-red ware with an incurved internally-thinned rim, gradually-receding sides and a dwarf channel-like spout. Though lipped basins are prolific, channel-spouted basins are rare and found only in the rampart-filling. Of medium fabric, it has a deep-red slip. From the rampart-filling.

Type XLIII. Basin of dull-red ware with an inturned internally-collared and grooved rim and receding sides. Of coarse fabric, it is devoid of any slip. From Pit 1. This type is rare.

Type XLIV. Basin of dull-red ware with an out-turned externally-thickened mildly-bevelled rim, receding sides and an inconspicuous lip. Of medium fabric, it is devoid of any slip. From Phase B of Period I. As it is a small fragment, it is not known if there was a second lip. In that case it probably served as a frying-pan with the inconspicuous lips serving as grips.

Type XLV. Basin of red ware with an incurved internally-beaded and externally-thickened rim, convex sides and a prominent lip. This type and its variants are distinguished by a groove below the rim on the exterior. Of medium fabric, it has a red slip. From Pit 1. Lipped basins, evidently meant for keeping and serving liquid substance, are profuse at the site. With rare exceptions, the lips are small pieces with a tiny fragment of the body attached to it and do not permit of the reconstruction of the basins with their diameter. There are reasons to believe that all the variants of this type, illustrated here, were lipped. *Variant XLVa*, of red ware, differs from the above by its featureless rim and prominently-receding sides. Of fine fabric, it is internally black and externally red and bears a deep-red slip on the exterior. From Phase A of Period I. *Variant XLVb*, of red ware, differs from the preceding by its bevelled rim and a groove on the convex body. Of medium fabric, it bears a bright-red slip. From Pit 1. *Variant XLVc*, of red ware, differs from the main type by its narrowing beaked rim and a globular profile. Of medium fabric, it presents a bright-red slip. From Phase A of Period I. *Variant XLVd*, of red ware, differs from the preceding by its inturned bluntly-beaked and internally ridged rim. Of medium fabric, it bears a bright-red slip. From Pit 1. *Variant XLVe*, of red ware, is distinguished by a closing rim, inconspicuous grooves below the rim and receding sides. Of medium fabric, it presents a bright-red slip. From Phase B of Period I. *Variant XLVf*, of grey ware, differs from *XLVa* by its narrowing rim. Of medium fabric, it is treated with a dark-grey slip. From Phase B of Period I. This type of vessels is extremely rare in grey ware.

¹ P. C. Mukherji, *op. cit.*, pl. XIII, 4 and pl. XXVIII, fig. 2.

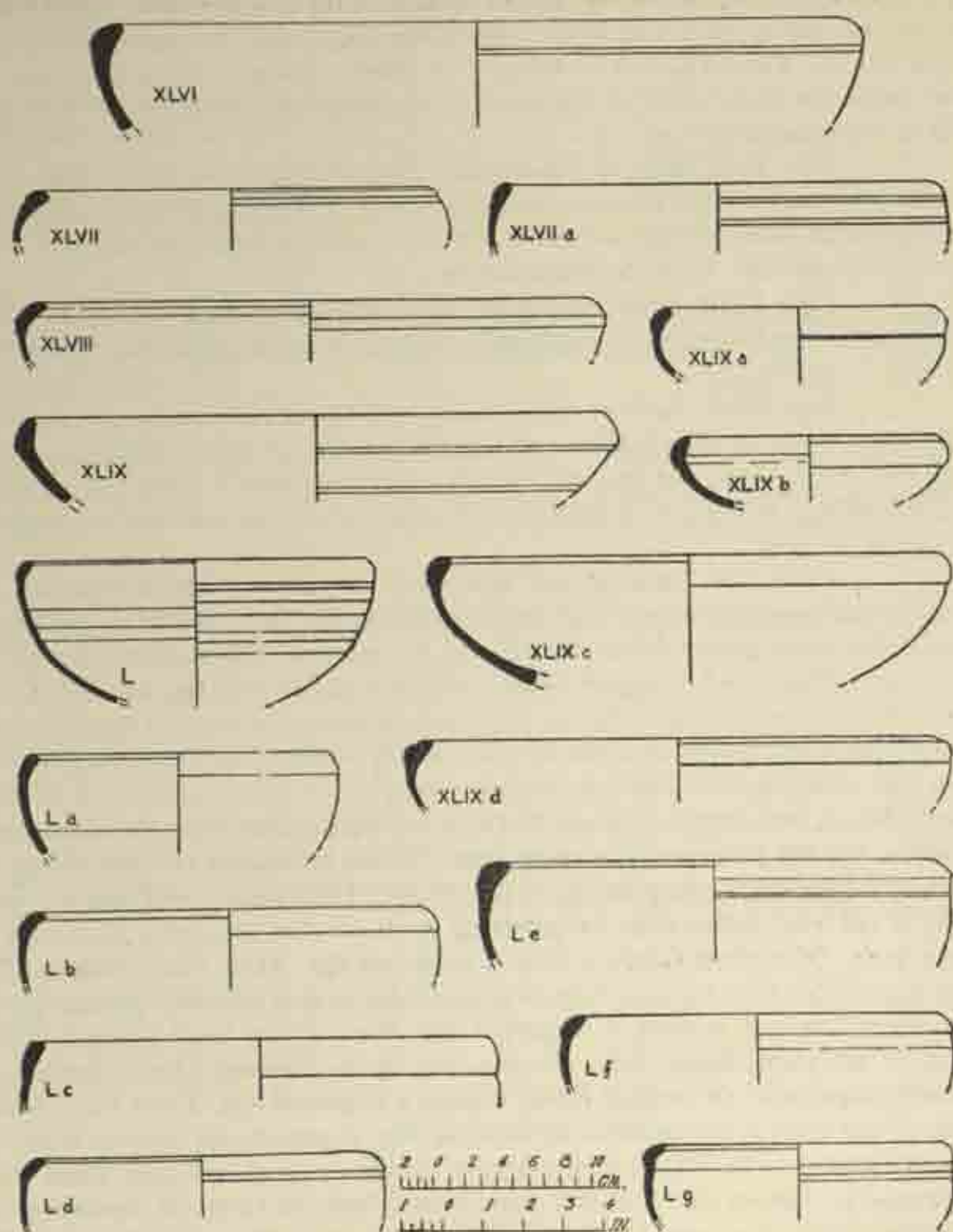


FIG. 10. Tilaura-kot: pottery from Period I (other wares)

Type XLVI. Basin of red ware with an inturned externally-thickened and grooved rim and receding sides. Of medium fabric, it presents a red slip. From Phase B of Period I.

Type XLVII. Basin of red ware with a narrowing externally-thickened and grooved rim and a bulging profile. Of fairly fine fabric, it bears a red slip. From Phase A of Period I. *Variant XLVIIa*, of red ware, differs from the above by its inturned rim and less bulging profile. Of fairly fine fabric, it preserves a red slip. From Phase A of Period I.

Type XLVIII. Basin of red ware with a narrowing externally-thickened and cordoned rim and receding sides. Of medium fabric, it presents a red slip. From Phase B of Period I.

Type XLIX. Basin of red ware with a vertical externally-collared and mildly-bevelled rim and receding sides. Of fairly fine fabric, it bears a red slip. From Phase A of Period I. This type is similar to *Type XXIIa* of Period III from Hastināpura. *Variant XLIXa*, of red ware, has an inturned externally triangular-collared rim. Of fine fabric, it is devoid of any slip. From Pit 1. *Variant XLIXb*, of red ware, differs from the preceding by its elliptical-collared rim. Of fine fabric, it presents a red slip. From Phase A of Period I. *Variant XLIXc*, of red ware, differs from the preceding by its oval-collared rim. Of medium fabric, it preserves a red slip. From Pit 1. *Variant XLIXd*, of red ware, is distinguished by its narrowing rim with two grooves demarcating the collar. Of fine fabric, it bears a red slip. From Pit 1. Most of the variants of this type as well those of the succeeding two types (*L* and *LI*) seem to be lipped. These three types are allied, distinguished from one another by the shape of the body.

Type L. Basin of red ware with an incurved externally ellipsoid-collared rim and a semicircular body. It has inconspicuous grooves on the body. Of fine fabric, it bears a bright-red slip. From Phase A of Period I. *Variant La*, of red ware, differs from the above by its mildly-bevelled oblongish collar. Of fine fabric, it presents a bright-red slip. From Phase A of Period I. *Variant Lb*, of red ware, differs from the main type by its inconspicuous internally-beaded rim. Of fairly fine fabric, it bears a red slip. From Phase A of Period I. *Variant Lc*, of red ware, differs from *La* by its inturned flat-topped rim. Of medium fabric, it presents a bright-red slip. From Pit 1. *Variant Ld*, of red ware, with its inverted externally elliptical-collared rim and straighter upper profile is similar to *Type XXIIb* of Period III from Hastināpura. Of fairly fine fabric, it bears a bright-red slip. From Pit 1. *Variant Le*, of red ware, is distinguished by its externally-triangular collar. Of medium fabric, it presents a bright-red slip. From Pit 1. *Variant Lf*, of red ware, with its narrowing externally elliptical-collared rim is analogous to *Type XXIIc* of Period III from Hastināpura. Of fairly fine fabric, it bears a bright-red slip. From Pit 1. *Variant Lg*, of red ware, is distinguished by its externally oval-collared rim with a prominent channel-like depression on the inner side. Of fine fabric, it has a bright-red slip. From Pit 1.

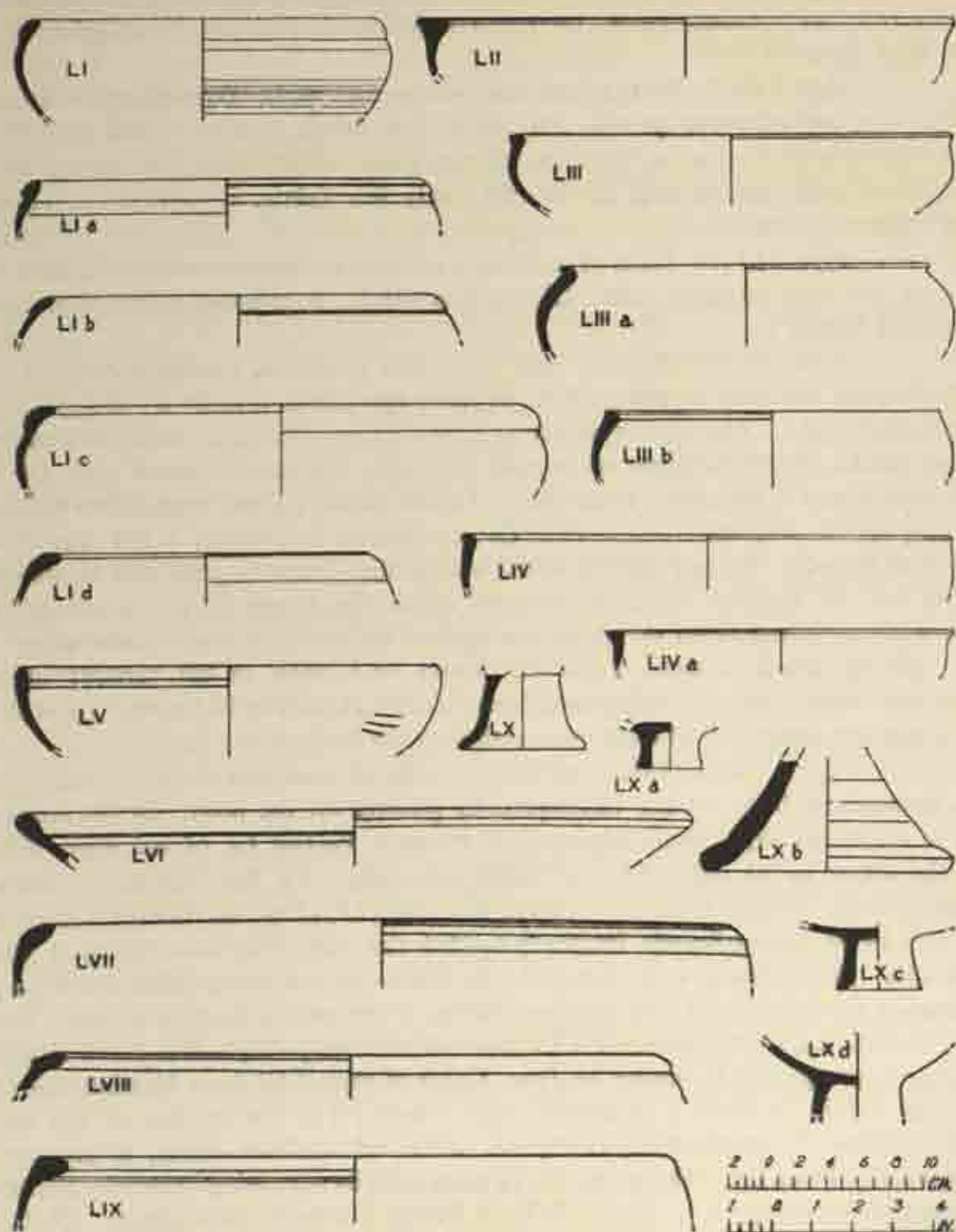


FIG. 11. Tilaura-kot: pottery from Period I (other wares)

Type LI. Basin of red ware with an inturned externally oval-collared rim and convex sides first expanding and then receding presumably to a rounded base. Of fairly fine fabric, it presents a bright-red slip. From Pit 1. *Variant LIa*, of red ware, differs from the above in having an undercut rim and an inconspicuous ridge on the body. Of fairly fine fabric, it preserves a bright-red slip. From Pit 1. *Variant LIb*, of red ware, differs from the main type by its narrowing elliptical-collared rim. Of fairly fine fabric, it bears a red slip. From Phase A of Period I. *Variant LIc*, of red ware, differs from the main type by its narrowing internally-beaded rim. Of fairly fine fabric, it presents a bright-red slip. From Pit 1. *Variant LId*, of red ware, differs from *Variant LIb* by its mildly-bevelled rim with a groove on the top. Of fairly fine fabric, it has a red slip. From Phase A of Period I.

Type LII. Basin of dull-red ware with a vertical nail-headed rim having two grooves on the top and inconspicuously-convex sides sharply curving towards the base. Of medium fabric, it has a bright-red slip. From Pit 1. Extremely rare, this type was absent in the stratified deposit of Phase A of Period I.

Type LIII. Basin of red ware with an everted internally mildly-bevelled rim and convex sides, first expanding and then receding towards a presumably rounded base. Of medium fabric, it presents a red slip. From Phase B of Period I. *Variant LIIla*, of dull-red ware, differs from the above by its externally-undercut rim and a prominently-bulging profile presenting the appearance of a vase. Of medium fabric, it bears a dark-red slip. From Phase B of Period I. *Variant LIIlb*, of dull-red ware, differs from the main type by its obliquely-bevelled and grooved rim. Of medium fabric, it presents a red slip. From Phase A of Period I. This type is not very common.

Type LIV. Basin of dull-red ware with an everted bevelled rim and an almost straight sides curving near the base. Of medium fabric, it bears a red slip. From Pit 1. *Variant LIVa*, of dull-red ware, differs from the above by its flat-topped rim. Of medium fabric, it preserves a red slip. From Phase B of Period I. This type is not very common.

Type LV. Basin of red ware with a vertical featureless rim and gradually-receding sides. It bears on the exterior surface three incised strokes (pl. XXII, 8; p. 17). Of medium fabric, it has a red slip. From Pit 1.

Type LVI. Basin of red ware with an out-turned internally-thickened rim and sharply-receding sides. Of medium fabric, it preserves a red slip. From Phase A of Period I.

Type LVII. Basin of red ware with a closing internally-thickened rim and almost straight sides curving near the base. Of fairly fine fabric, it bears a red slip. From Pit 1.

Type LVIII. Basin of dull-red ware with a narrowing internally-thickened and externally-thickened and -bevelled rim and sides initially expanding. Of medium fabric, it has a red slip. From Pit 1.

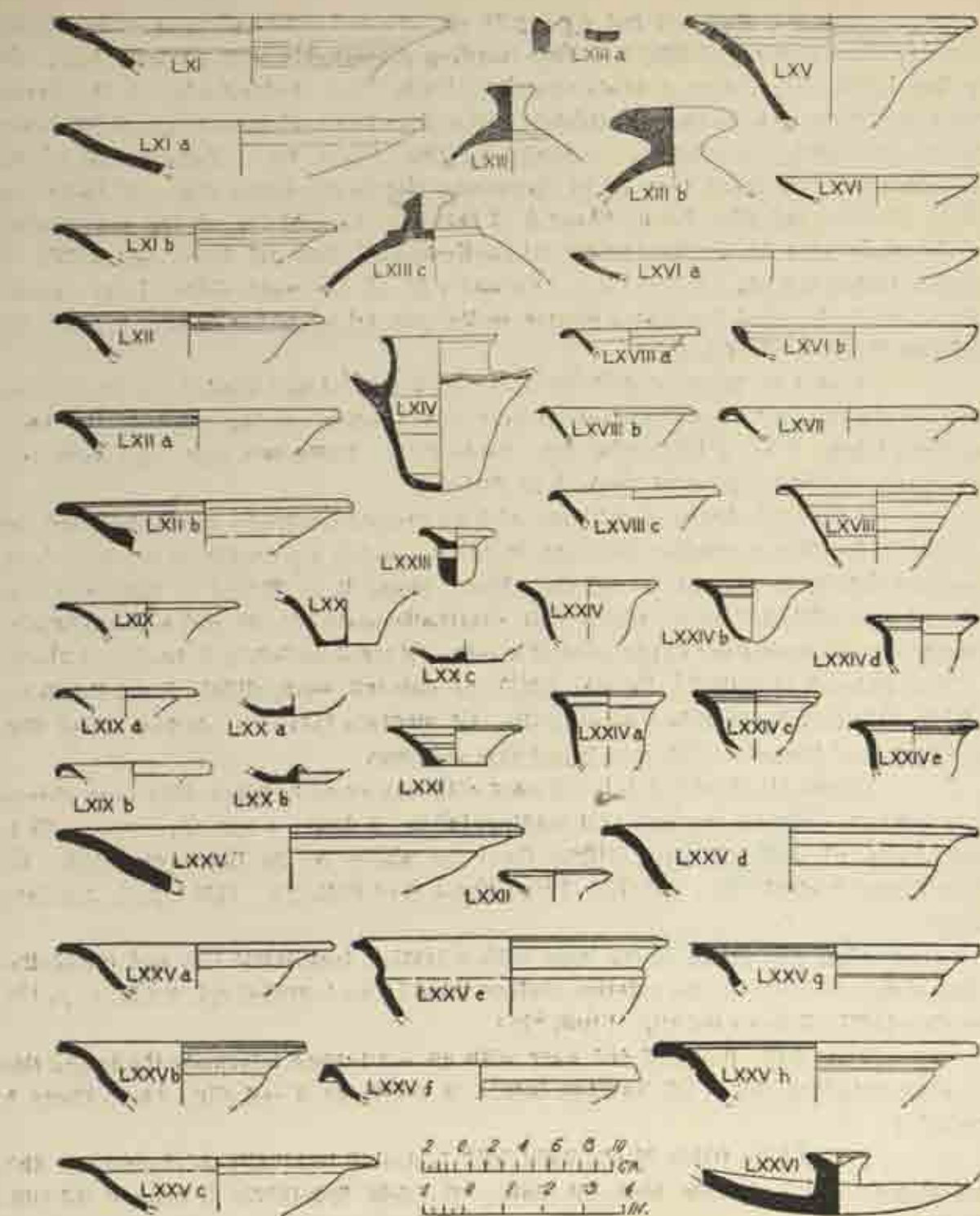


FIG. 12. Tilaura-kot: pottery from Period I (other wares)

Type LIX. Basin of red ware with a closing externally- and internally-thickened rim and sides inconspicuously-expanding initially. Of medium fabric, it has a red slip. From Pit 1.

Type LX. Vessel-on-stand of red ware with a gradually-expanding stem ending in a flaring base. Of fairly fine fabric, it preserves a red slip. From Pit 1. *Variant LXa*, of red ware, differs from the above by its stunted vertical stem externally thickened at the base. Of fairly fine fabric, it presents a red slip. From Phase B of Period I. *Variant LXb*, of red ware, has a sharply-expanding thick stem with a splayed-out base. Of medium fabric, it bears a red slip. From Pit 1. *Variant Lxc*, of red ware, is distinguished by its flattish extant part of the vessel and internally-bevelled base. Of fairly fine fabric, it does not preserve any slip. From the rampart-filling. *Variant LXd*, of red ware, with its inconspicuously-convex extant stem, has a fairly deep vessel. Of fairly fine fabric, it has a red slip. From Pit 1. The exact shape of this type of vessels could not be reconstructed due to the absence of a complete pot.

Type LXI. Lid of red ware with an out-turned featureless rim, sharply-receding sides and inconspicuous grooves on the body. Of fairly fine fabric, it has a red slip. From Phase A of Period I. *Variant LXIa*, of red ware, differs from the above by a prominent depression below the rim on the exterior. Of fairly fine fabric, it presents a red slip. From Phase B of Period I. *Variant LXIb*, of red ware, differs from the main type by prominent grooves below the rim on both sides. Of fairly fine fabric, it has a red slip. From Phase A of Period I.

Type LXII. Lid of red ware with a flaring featureless rim, prominent grooves below the rim on both sides, receding sides and presumably a convex base. Of fairly fine fabric, it preserves a red slip. From Pit 1. *Variant LXIIa*, of red ware, differs from the above by the absence of grooves on the outer side. Of fairly fine fabric, it bears a red slip. From Pit 1. Similar to the preceding, *Variant LXIIb*, of red ware, has gradually-thickened sides with an inconspicuous projection near the extant end.¹ Of medium fabric, it has a red slip. From Pit 1. Grooveless variety of this type is also available.

Type LXIII. Lid of red ware with a flattish nail-headed knob (similar to the one on *Type LIIIa* from Period III of Hastināpura) for lifting and roughly hemispherical profile. The body and the knob, the former wheel-turned and the latter hand-made, were luted together with their junction clearly visible. Of fairly fine fabric, it presents a red slip. From Phase A of Period I. *Variant LXIIIa*, of red ware, preserves only the knob which is bicornate. Of fairly fine fabric, it is stripped of slip. From Pit 1. *Variant LXIIIb*, of red ware, with its roughly barrel-shaped handle is reminiscent of the crystal casket of Piprahwa, the handle of which, however, is in the form of a hollow fish.² Of coarse

¹ This projection might have ended in a device for lifting. In that case, the position of the lid should be upside-down.

² P. C. Mukherji, *op. cit.*, pl. XXVIII, fig. 2.

fabric, it preserves a red slip. From the rampart-filling. *Variant LXIIIc*, of red ware, differs from the main type by the prominent platform below the handle, the platform actually having been the button-base of the bowl utilized for the lid. The fixing of the handle was away from the centre. Of fairly fine fabric, it bears a red slip. From the rampart-filling. This type of lids is not very common.

Type LXIV. Lid of red ware with a slightly out-turned externally-beaded rim, a prominent flange below the neck and a conspicuously sagger-base. The upper part with the neck, fashioned separately, is luted with the lower part. Of fairly fine fabric, it preserves a red slip. From Pit 1. This type, which is not common, is probably the precursor of *Type XII* from Period IV of Hastināpura.

Type LXV. Lid of red ware with an out-turned featureless rim with prominent grooves below, sharply-receding sides and presumably a sagger-base. Of medium fabric, it has a red slip. From Phase B of Period I.

Type LXVI. Saucer-like lid of grey ware with an out-turned featureless rim and sides receding with a mild curve to a presumably convex base. Of fine fabric, it bears a black slip. From Pit 1. *Variant LXVIa*, of black-slipped ware, has an internally-thickened rim. Of fairly fine fabric, it presents a jet-black slip. From the rampart-filling. *Variant LXVIb*, of black-slipped ware, has an internally-thickened and bevelled rim. Of fine fabric, it is provided with a jet-black slip. From the rampart-filling.

Type LXVII. Lid of red ware with a flaring externally-clubbed rim and sides curving to a presumably rounded base. Of fairly fine fabric, it bears a red slip. From Phase A of Period I.

Type LXVIII. Lid of red ware with a drooping sharpened rim and gradually-receding sides. Of fine fabric and with inconspicuous grooves on the body, it has a red slip. From Pit 1. *Variant LXVIIIa*, of grey ware, differs from the above by its flaring externally-thickened rim. Of fine fabric, it is treated with a grey slip. From Pit 1. *Variant LXVIIIb*, of grey ware, differs from the preceding by its externally-clubbed rim. Of fine fabric, it is treated with a blackish-grey slip. From Phase A of Period I. *Variant LXVIIIc*, of grey ware, differs from the preceding by its beaked rim. Of fine fabric, it is treated with a blackish-grey slip. From Pit 1.

Type LXIX. Lid of grey ware with a flaring featureless rim and sharply-receding sides. Of fine fabric, it is treated with a grey slip. From Phase B of Period I. *Variant LXIXa*, of grey ware, differs from the above by its externally-clubbed rim. Of fine fabric, it is treated with a blackish-grey slip. From Phase B of Period I. *Variant LXIXb*, of grey ware, differs from the preceding by its drooping rim. Of fine fabric, it is treated with a blackish-grey slip. From Pit 1. The position of these illustrated specimens might as well be upside-down.

Type LXX. Lower portion of a lid of grey ware with flaring sides and a raised *dakshināvarta*-spiral issuing from a central pellet on the inner face of the base.

The outer side of the base bears thread-marks. Of fine fabric, it is treated with a blackish-grey slip. From Phase A of Period I. *Variant LXXa*, of grey ware, with a similar spiral surrounded by a wide depression, appears to have convex sides. Of fine fabric, it is treated with a grey slip. From Pit 1. *Variant LXXb*, of grey ware, with its shape similar to that of the preceding, is distinguished by a central conical knob with two grooves. Of fairly fine fabric, it is treated with a blackish-grey slip. From Pit 1. Similar to the preceding with its central knob, *Variant LXXc*, of grey ware, has an inconspicuously button-base with thread-marks. Of fairly fine fabric, it has a blackish-grey slip. From Pit 1.

Type LXXI. Lid of grey ware with a flaring featureless rim, receding sides and an inconspicuously button-base. Of fairly fine fabric, it presents a black slip. From Phase A of Period I.

Type LXXII. Lid of red ware with a closing bevelled and grooved rim and concave sides. Of fairly fine fabric, it bears a red slip. From Phase B of Period I. This type is uncommon.

Type LXXIII. Stopper-like solid lid of red ware, a solitary specimen, with a flaring featureless rim and a pronouncedly sagger-base. It is distinguished by a horizontal perforation, presumably a device for suspension of the pot fastened with the lid. Of fairly fine fabric, it has a red slip. From the rampart-filling.

Type LXXIV. Small lid of red ware with a flaring featureless rim, concave sides and a prominently sagger-base. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. With two grooves on the inner side and one on the outer, *Variant LXXIVa*, of red ware, has an elongated sagger-base. Of fairly fine fabric, it bears a red slip. From Pit 1. *Variant LXXIVb*, of red ware, differs from the main type by three prominent grooves on the inner side. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. *Variant LXXIVc*, of red ware, bears two grooves on the inner side and a single groove on the outer. Of fairly fine fabric, it preserves a red slip. From Phase A of Period I. *Variant LXXIVd*, of red ware, is distinguished by its carinated waist and two prominent grooves on the inner side below the rim. Of fairly fine fabric, it bears a brownish-red slip. From Pit 1. *Variant LXXIVe*, of red ware, differs from the main type by several inconspicuous grooves on both sides. Of fairly fine fabric, it has a red slip. From Phase B of Period I.

Type LXXV. Lid of red ware with an out-turned featureless rim and sides bluntly carinated to a convex base. Of fairly fine fabric, it presents a red slip. From Pit 1. *Variant LXXVa*, of red ware, differs from the above by its flaring rim and rounded base. Of fairly fine fabric, it bears a red slip. From Phase B of Period I. *Variant LXXVb*, of red ware, differs from the preceding by its externally-thickened and grooved rim. Of fairly fine fabric, it has a red slip. From Pit 1. *Variant LXXVc*, of red ware, differs from *Variant LXXVa* by its out-turned featureless rim. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. *Variant LXXVd*, of red ware, differs from the preceding by its flaring grooved rim. Of fairly fine fabric, it preserves a red slip.

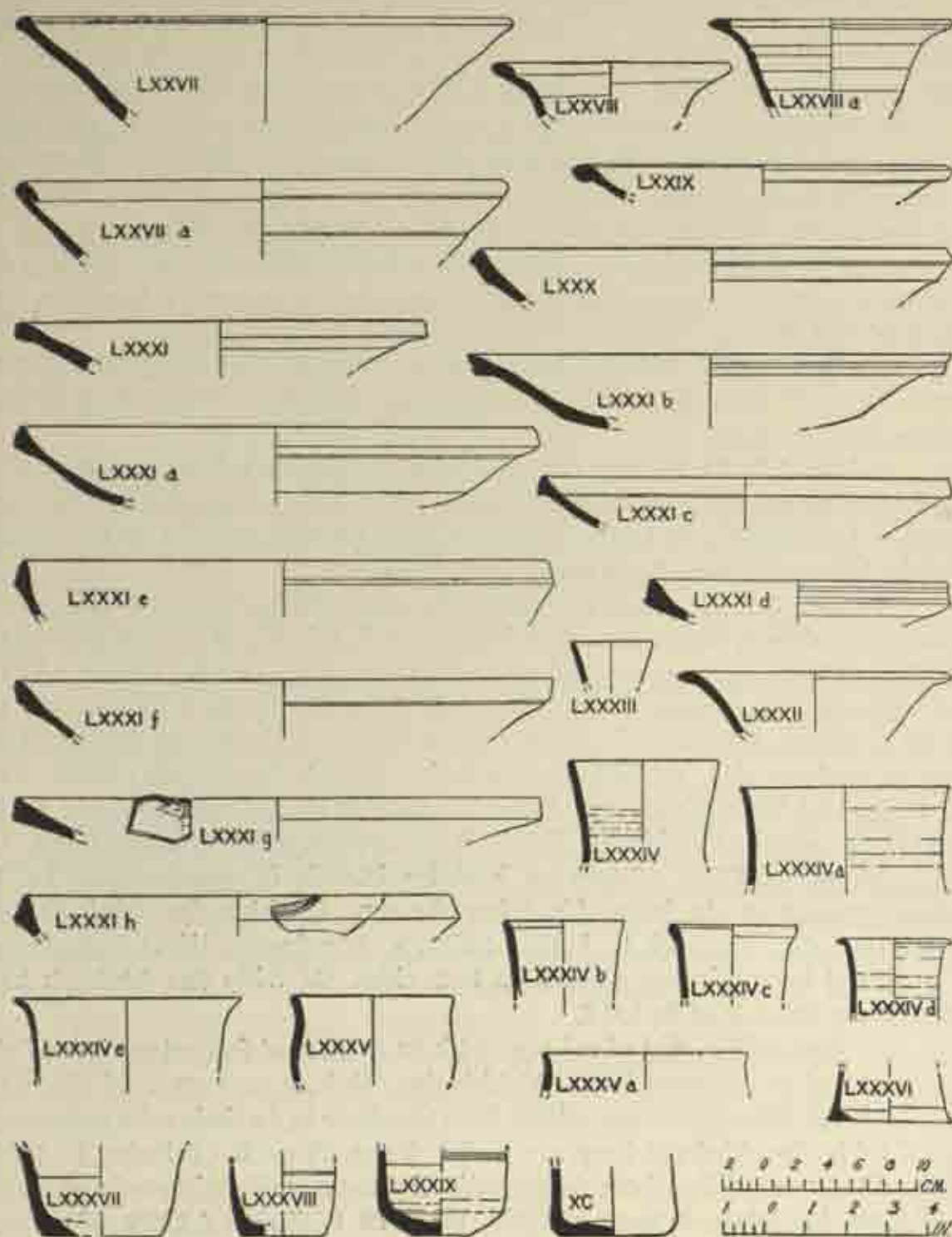


FIG. 13. Tilaura-kot: pottery from Period I (other wares)

From Phase B of Period I. *Variant LXXVe*, of red ware, differs from the preceding by its thickened rim and prominently-concave part above the carination. Of fairly fine fabric, it preserves a red slip. From Pit 1. *Variant LXXVf*, of red ware, differs from the preceding by its beaked rim, convex base and absence of groove. Of fairly fine fabric, it presents a red slip. From Pit 1. *Variant LXXVg*, of red ware, differs from *Variant LXXVb* by two prominent grooves on the inner face and several inconspicuous grooves on the outer face. Of fine fabric, it preserves a red slip. From Phase B of Period I. *Variant LXXVh*, of red ware, differs from the preceding by its flaring featureless rim and three prominent grooves on both sides below the rim. Of fairly fine fabric, it bears a red slip. From Phase A of Period I.

Type LXXVI. Lid of red ware with a convex base and a solid nail-headed knob having a central depression. Of medium fabric, it has a red slip. From Pit 1. This rare type is absent in the regular stratified deposit of Period I.

Type LXXVII. Deep and large lid of red ware with an out-turned inconspicuously internally-collared rim and receding sides. Of fairly fine fabric, it has a bright-red slip. From Pit 1. *Variant LXXVIIa*, of red ware, differs from the above by its prominently-collared and undercut rim. Of fairly fine fabric, it presents a bright-red slip. From Pit 1.

Type LXXVIII. Lid of red ware with a flaring internally oval-collared rim and slightly-concave sides. Of fairly fine fabric, it preserves a red slip. From Phase A of Period I. *Variant LXXVIIIa*, of red ware, differs from the above by its elliptical-collared rim. Of fairly fine fabric, it presents a bright-red slip. From Phase A of Period I.

Type LXXIX. Shallow lid of red ware with a splayed-out externally-collared rim and slightly-curved sides. Of fairly fine fabric, it preserves a red slip. From Pit 1.

Type LXXX. Lid of red ware with an out-turned externally-thickened and double-ridged rim. Of medium fabric, it has a red slip. From Pit 1.

Type LXXXI. Lid of red ware with an out-turned externally-thickened rim and receding sides. Of medium fabric, it is devoid of any slip at present. From Phase A of Period I. *Variant LXXXIa*, of red ware, with a presumably flattish base differs from the above by its externally-bevelled rim with a groove below on the exterior. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant LXXXIb*, of red ware, is distinguished by a groove on the bevelled rim and a second below the rim on the exterior. Of medium fabric, it preserves a bright-red slip. From Phase B of Period I. *Variant LXXXIc*, of red ware, differs from the main type by its bevelled and undercut rim. Of medium fabric, it presents a red slip. From Phase A of Period I. *Variant LXXXId*, of red ware, differs from *Type LXXXIa* by two prominent grooves on the bevelled rim. Of medium fabric, it preserves a red slip. From Phase A of Period I. *Variant LXXXIe*, of red ware, has an almost vertical externally-thickened, bevelled and ridged



rim. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant LXXXIf*, of red ware, has an out-turned externally-bevelled and grooved rim. Of medium fabric, it preserves a red slip. From Pit 1. *Variant LXXXIg*, of red ware, is distinguished from the main type by its bevelled rim with an inconspicuously-pinched lip, perhaps a device for lifting. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant LXXXIh*, of red ware, differs from the above by its lip made by inverting a portion of the rim on the outer side. Of medium fabric, it is devoid of any slip at present. From Pit 1. This type of lids resembles *Type CXII* of frying-pans. None of these, however, bears any soot to suggest such use.

Type LXXXII. Lid of red ware with a flaring featureless rim and slightly-concave sides. Of medium fabric, it has a red slip. From Pit 1.

Type LXXXIII. Small tumbler-like vessel, of red ware, with a slightly out-turned featureless rim and gradually-receding sides. Of medium fabric, it presents a red slip. From Pit 1.

Type LXXXIV. Tumbler-like vessel, of red ware, with a vertical featureless rim and mildly-concave sides having inconspicuous grooves on the inner side. Of medium fabric, it bears a red slip externally and on the upper part of the inner side. From Phase B of Period I. *Variant LXXXIVa*, of red ware, differs from the above by its out-turned rim. Of medium fabric, it presents a red slip. From Pit 1. *Variant LXXXIVb*, of red ware, differs from the main type by its internally-bevelled rim. Of medium fabric, it preserves a bright-red slip. From Pit 1. *Variant LXXXIVc*, of red ware, differs from the main type by its out-turned oval rim. Of medium fabric, it has a dark-red slip. From Phase A of Period I. *Variant LXXXIVd*, of red ware, is distinguished by a flaring sharpened rim. Of fine fabric, it presents a red slip. From Phase A of Period I. *Variant LXXXIVe*, of red ware, differs from the preceding by its featureless rim. Of medium fabric, it has a red slip. From Pit 1.

Type LXXXV. Tumbler-like vessel, of red ware, with an inconspicuously out-turned featureless rim and sides, first concave and next bulging. Of fairly fine fabric, it preserves a red slip. From Phase B of Period I. *Variant LXXXVa*, of red ware, differs from the above by its externally inconspicuously-thickened rim. Of medium fabric, it has a red slip. From Phase B of Period I.

Type LXXXVI. Lower part of a tumbler-like vessel, of grey ware, with a projecting flat base bearing thread-marks. Of fine fabric, it presents a black slip. From Phase A of Period I.

Type LXXXVII. Lower part of a tumbler-like vessel, of red ware, with a flat base bearing thread-marks and concave sides. Of medium fabric, it preserves a red slip. From Pit 1.

Type LXXXVIII. Lower part of a tumbler-like vessel, of red ware, with a flat base bearing thread-marks and nearly-straight grooved sides. Of medium fabric, it has a red slip. From Phase B of Period I.

Type LXXXIX. Lower part of a tumbler-like vessel of red ware with sides bluntly carinated to a flat base bearing thread-marks. Of medium fabric, it presents a red slip. From Pit 1.

Type XC. Lower part of a tumbler-like vessel with sides abruptly curving to a flat base bearing thread-marks. Of medium fabric, it preserves a red slip. From Phase A of Period I.

Type XCI. Tumbler-like vessel of red ware with internally-grooved receding sides and a flat narrow base bearing thread-marks. Of medium fabric, it presents a red slip. From Phase A of Period I. *Variant XC Ia*, of red ware, differs from the above by its more spacious girth and inconspicuously-concave base with thread-marks. Of fine fabric, it preserves a bright-red slip. From Phase A of Period I. *Variant XC Ib*, of red ware, is distinguished by a spiral issuing from a raised central pellet on the inner face of the base. Of thick medium fabric, it is devoid of any slip at present. From Phase B of Period I. *Variant XC Ic*, of red ware, has a central inconspicuous knob. Of thick medium fabric, it is devoid of any slip at present. From Pit 1. This type of vessels can as well be used as lids.

Type XCII. Miniature *ghaṭa* of red ware with an out-turned featureless rim, an ovoid body and an inconspicuously button-base with thread-marks. Of fine fabric, it is devoid of any slip at present. From Pit 1. *Variant XCII a*, of red ware, differs from the above by its inconspicuously-ledged shoulder and thicker walls. Of fairly fine fabric, it preserves a red slip. From Phase B of Period I. *Variant XCII b*, of red ware, differs from the main type by its bevelled rim. Of fairly fine fabric, it is devoid of any slip at present. From Phase B of Period I.

Type XCIII. Vase of grey ware with a vertical neck and a broad shoulder. Of fine fabric, it has a black slip externally and on the inner side of the neck. From Phase A of Period I. *Variant XCIII a*, of red ware, is distinguished by its perforated neck. Of fine fabric, it preserves a bright-red slip externally. From Phase A of Period I. This type is rare.

Type XCIV. Miniature *ghaṭa* of grey ware with a pear-shaped profile and a flat narrow base bearing thread-marks. Of fine fabric, it has a black slip externally. From Pit 1.

Type XCV. Miniature vase of grey ware with a bluntly-carinated profile. Of fine fabric, it has a blackish-grey slip. From Phase A of Period I.

Type XCVI. Miniature *ghaṭa* of grey ware with a concave neck, a pear-shaped profile truncated near the base and a flat base bearing thread-marks. Of fine fabric, it has a black slip externally. From the rampart-filling. *Variant XCVI a*, of grey ware, differs from the above by its inconspicuously button-base. Of fine fabric, it has a black slip externally. From Pit 1. *Variant XCVI b*, of grey ware, is distinguished by a cordon near the base of the neck. Of fine fabric, it is provided with a black slip externally. From Pit 1. *Variant XCVI c*, of grey ware, has a small central pellet on the

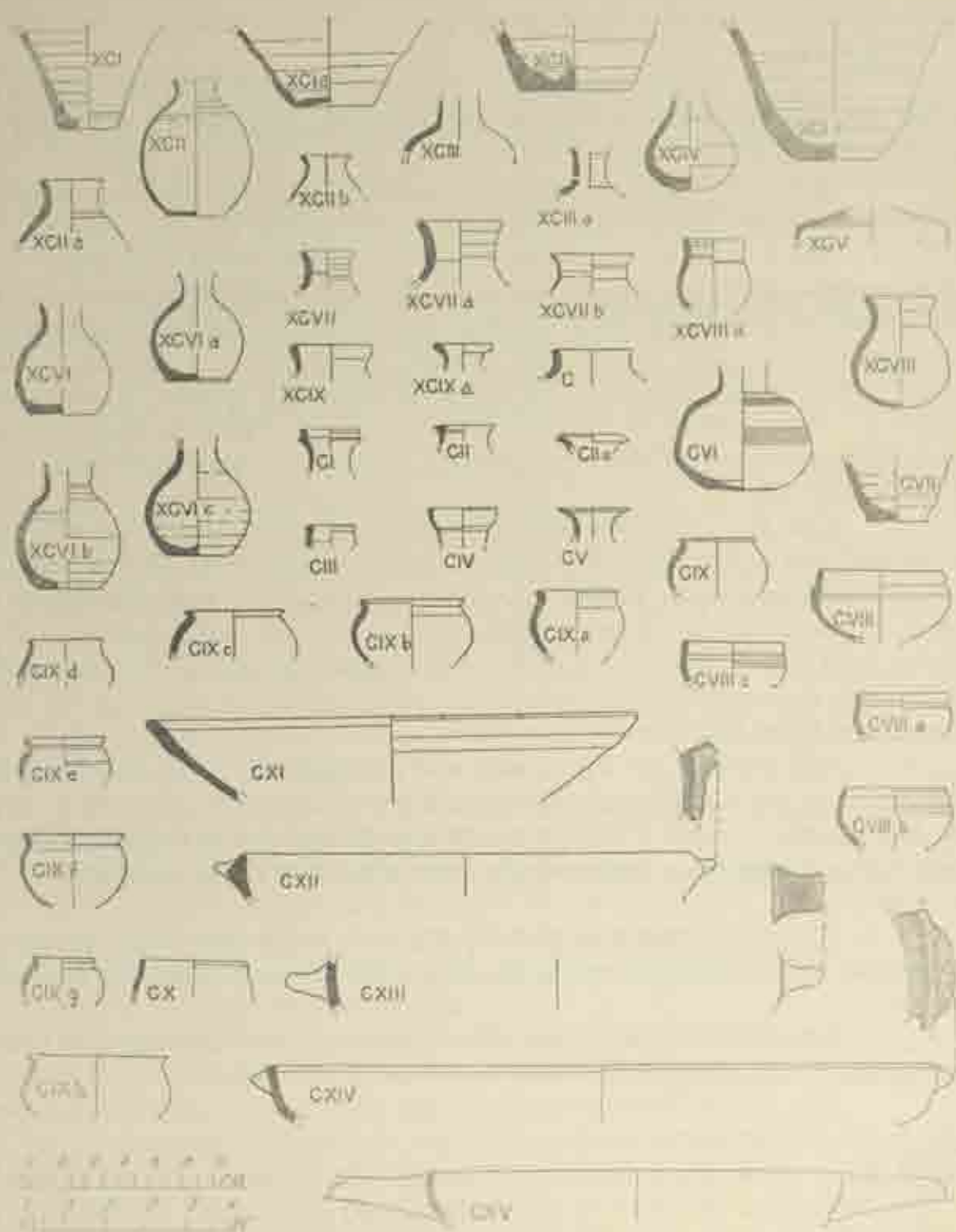


FIG. 14. Tilaura-kot: pottery from Period I (other wares)

inner side of the base. Of fine fabric, it has a black slip externally. From Pit 1. This type of *ghaṭas* is fairly common.

Type XCVII. Miniature *ghaṭa* of red ware with an out-turned internally-thinned rim and a conspicuously-grooved concave neck. Of fine fabric, it presents a red slip. From Pit 1. *Variant XCVIIa*, of grey ware, differs from the above by its featureless rim. Of fine fabric, it is devoid of any slip at present. From Pit 1. *Variant XCVIIb*, of grey ware, differs from the preceding by its splayed-out rim. Of fine fabric, it is treated with a grey slip. From Phase A of Period I.

Type XCVIII. Miniature *ghaṭa* of red ware with an out-turned featureless rim, a concave neck and a rounded base. Of fine fabric, it preserves a bright-red slip. From Pit 1. *Variant XCVIIIa*, of red ware, has an almost vertical rim. Of fairly fine fabric, it has a red slip. From Phase A of Period I.

Type XCIX. Miniature *ghaṭa* of grey ware with a vertical externally-collared rim. Of fine fabric, it preserves a black slip. From Phase B of Period I. *Variant XCIXa*, of grey ware, differs from the above by its out-turned rim. Of fine fabric, it has a black slip. From Phase B of Period I.

Type C. Miniature vase of red ware with a slightly out-turned featureless rim and a short neck. Of fairly fine fabric, it has a red slip. From Phase B of Period I.

Type CI. Miniature vase of red ware with a vertical flatly-bevelled externally-ridged rim and a concave neck. Of fine fabric, it presents a red slip. From Pit 1. This type is rare.

Type CII. Miniature vase of red ware with a vertical nail-headed rim. Of fine fabric, it is devoid of any slip. From Phase B of Period I. *Variant CIIa*, of grey ware, differs from the above by its out-turned rim. Of fine fabric, it has a black slip. From Pit 1. This type is rare.

Type CIII. Miniature vase of grey ware with a vertical externally-thickened, grooved and ridged rim. Of fine fabric, it is provided with a black slip. From Pit 1. This type is rare.

Type CIV. Miniature vase of red ware with an almost vertical externally-collared rim having a prominent depression on the inner side. Of fine fabric, it is devoid of any slip at present. From Pit 1. This type is extremely rare.

Type CV. Miniature vase of grey ware with a flaring featureless rim and a concave neck. Of fine fabric, it has a black slip. From Pit 1. This type is rare.

Type CVI. Miniature vase, a solitary specimen, of red ware, with a concave neck, an oblique shoulder, a bluntly-carinated body and a flat base. With series of fine grooves on the body and shoulder and of medium fabric, it has a red slip. From the uppermost level of Phase B of Period I.

Type CVII. Miniature *ghaṭa* of grey ware with receding sides and an inconspicuously button-base bearing thread-marks. Of fine fabric, it preserves a black slip. From Pit 1.

Type CVIII. Miniature vase of red ware with a slightly-inturned internally-thinned rim, an inconspicuous neck and a body, with a groove, curving to a rounded base. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. *Variant CVIIIa*, of red ware, differs from the above by a groove on the inner side of the neck and the absence of the groove on the body. Of fairly fine fabric, it preserves a red slip. From Phase A of Period I. *Variant CVIIIb*, of red ware, differs from the main type by its slightly-everted rim and grooves on the outer side of the body. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. *Variant CVIIIc*, of red ware, differs from *Variant CVIIIa* by a groove on the outer side of the uppermost part of the body. Of fairly fine fabric, it has a red slip. From Phase A of Period I. This type is fairly common.

Type CIX. Miniature vase of red ware with an out-turned featureless rim, a constricted neck and a globular profile. Of fairly fine fabric, it presents a dull-red slip. From Pit 1. *Variant CIXa*, of red ware, differs from the above by its flatly-bevelled rim and convex sides. Of fairly fine fabric, it is treated with a dull-red slip. From Phase B of Period I. *Variant CIXb*, of red ware, differs from the preceding by its internally-bevelled rim and slightly-bulging profile. Of fairly fine fabric, it bears a red slip. From Phase B of Period I. *Variant CIXc*, of red ware, differs from the main type by its bulging profile. Of fairly fine fabric, it presents a red slip. From Phase B of Period I. *Variant CIXd*, of red ware, differs from the main type by its pear-shaped profile. Of fairly fine fabric, it bears a red slip. From Pit 1. *Variant CIXe*, of red ware, differs from the main type by a groove on the inner side of the neck. Of fairly fine fabric, it is devoid of any slip at present. From Phase B of Period I. *Variant CIXf*, of red ware, differs from the main type by its prominently out-turned rim and two inner grooves flanking the neck. Of fairly fine fabric, it preserves a red slip. From Pit 1. *Variant CIXg*, of red ware, differs from the main type by an inconspicuous ledge on the shoulder. Of fairly fine fabric, it presents a red slip. From Phase B of Period I. *Variant CIXh*, of red ware, differs from the main type by its convex sides. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. This type is very common.

Type CX. Miniature vase of red ware with a vertical externally-bevelled rim, an inconspicuous neck and convex sides. Of medium fabric, it has a red slip. From Phase A of Period I.

Type CXI. Frying-pan of dull-red ware with an out-turned featureless rim and fastly-receding sides. It has soot on the outer side and blackened surface on the inner side. Whether it had any handle or not could not be determined from the available fragment. Of coarse fabric, it is devoid of any slip at present. From Pit 1.

Type CXII. Frying-pan of dull-red ware with an almost vertical externally-thickened and bevelled rim and small semicircular lug-handles. Of coarse fabric, it has a red slip. From Phase B of Period I.

Type CXIII. Fragment of a deep cooking-pan of dull-red ware with a small squarish lug-handle having a central depression on top. Of coarse fabric, it is devoid of any

slip at present. From Phase A of Period I. The shape of this type appears to be, on the analogy of a better-preserved sherd from Nipania (p. 207), like a globular bowl with a narrowing featureless rim.

Type CXIV. Frying-pan of dull-red ware with a slightly out-turned featureless rim having a groove below on the inner side, a bluntly-carinated body and arc-like lug-handles. Of coarse fabric, it is devoid of any slip at present. From the top level of Phase B of Period I.

Type CXV. Frying-pan of dull-red ware with an inturned featureless rim and long solid handles of ovoid section. Of medium fabric, it presents a red slip. From Phase B of Period I.

Type CXVI. Frying-pan of red ware with a horizontally splayed-out rim, fastly-receding sides and vertical loop-handles of ovoid section. The handles are fashioned separately. Of coarse fabric, it has a bright-red slip. From Pit 1. None of the pans of this rare type was found in the regular stratified deposit of Phase A of Period I.

Type CXVII. Deep frying-pan of red ware, a solitary specimen of its kind, with an everted featureless rim, a bluntly-carinated body and presumably long hollow handles. Of coarse fabric, it presents a red slip. From the rampart-filling. *Variant CXVIIa*, of red ware, differs from the above by its inturned internally-bevelled rim and a convex body. Fashioned separately, the long hollow handles, ring-like in section, are luted with the body. Of mica-dusted coarse fabric, it is devoid of any slip at present. From the surface. The handles were made hollow probably to temper heat.

Type CXVIII. Cooking-vessel (*hāṇḍī*), of dull-red ware, with a closing featureless rim, a sharply-carinated body having grooves on the upper interior side and presumably a rounded base. Of medium fabric and with grey patches in the core, it has a jet-black slip. From Phase A of Period I. *Variant CXVIIIa*, of red ware, differs from the above by its slightly-everted rim with a groove below on the exterior. Of coarse fabric, it preserves a red slip externally. From Pit 1. *Variant CXVIIIb*, of red ware, differs from the main type by a projecting triangular ridge at the carination. Of medium fabric, it presents a red slip. From Phase A of Period I. *Variant CXVIIIc*, of red ware, differs from the preceding by its blunt ridge at the carination and a groove on the rim. Of coarse fabric, it is devoid of any slip at present. From Pit 1. *Variant CXVIIId*, of red ware, differs from the preceding by its undercut ridge and absence of groove. Of coarse fabric, it presents a red slip on the outer side above the carination. From Phase B of Period I. *Variant CXVIIIe*, of red ware, differs from the main type by a groove above and below the carination. Of coarse fabric, it is provided with a red slip externally above the carination. From Phase A of Period I. *Variant CXVIIIf*, of red ware, differs from the preceding by the absence of grooves below the carination. Of medium fabric and with grey patches in the core, it presents a red slip. From Phase A of Period I. This type of *hāṇḍī*, though not altogether absent in the grey ware, is common in red ware. While the slip is normally restricted to the exterior surface

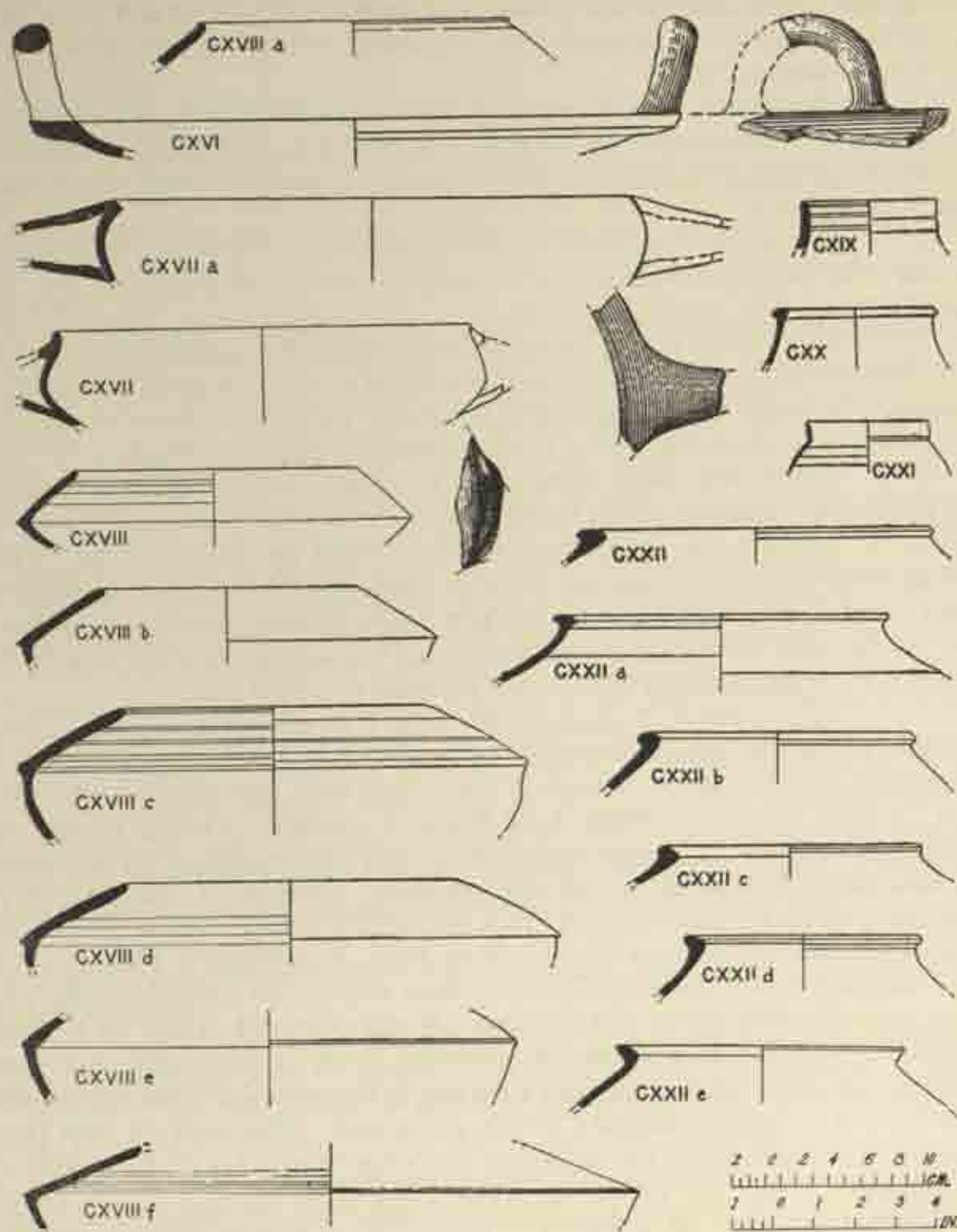


FIG. 15. Tilaura-kot: pottery from Period I (other wares)

above the carination, the lower part of the outer side below the carination is usually rough and sometimes mica-dusted. Evidence of the application of the clay paste on the lower exterior surface is also available in a few specimens. This type is fairly common.

Type CXXIX. Vase of dull-red ware with a vertical featureless rim and an almost straight neck having grooves on the inner side. Of medium fabric, it has a red slip. From the uppermost level of Phase B of Period I. This type is rare.

Type CXX. Vase of red ware with an inturned externally-beaded rim and a gradually-expanding neck. Of medium fabric, it is devoid of any slip at present. From Pit I. This type is rare.

Type CXXI. Vase of dull-red ware with an out-turned featureless rim, a bluntly-carinated neck and a convex shoulder. Of fairly fine fabric, it is devoid of any slip at present. From Pit I. This type is rare.

Type CXXII. Vase (*hāṇḍī*) of dull-red ware with a closing externally-thickened and undercut rim and a gradually-expanding shoulder. Of medium fabric, it presents a red slip. From Pit I. *Variant CXXIIa*, of red ware, differs from the above by a groove on the outer side of the rim and a depression below the rim on the inner side. There is a rib near the junction of the shoulder and the body. Of medium fabric, it presents a red slip externally. From Pit I. *Variant CXXIIb*, of red ware, is distinguished from the main type by the rounded external face of its rim. Of medium fabric, it preserves a red slip externally. From Phase B of Period I. *Variant CXXIIc*, of red ware, differs from the main type by its internally obliquely-bevelled rim. Of medium fabric, it presents a red slip externally. From Phase B of Period I. *Variant CXXIIId*, of red ware, differs from the preceding by its externally-clubbed rim. Of medium fabric, it preserves a red slip. From Pit I. *Variant CXXIIe*, of red ware, differs from the preceding by not being thick externally. Of medium fabric, it has a red slip. From Phase B of Period I. This type was not found in the regular stratified deposit of Phase A of Period I.

Type CXXIII. Vase of red ware with a narrowing externally elliptical-collared rim and a gradually-expanding shoulder. Of fairly fine fabric, it presents a red slip. From Pit I. *Variant CXXIIIa*, of red ware, differs from the above by its mildly-chamfered rim. Of fairly fine fabric, it preserves a red slip. From Pit I. *Variant CXXIIIb*, of red ware, differs from the main type by its externally oval-collared rim. Of medium fabric, it presents a red slip. From Pit I. *Variant CXXIIIc*, of red ware, differs from the preceding by its bulging shoulder. Of fairly fine fabric, it presents a red slip. From Pit I. *Variant CXXIIId*, of red ware, differs from the main type in having a groove on the outer side of the rim. Of fairly fine fabric, it preserves a red slip. From Pit I. *Variant CXXIIIe*, of red ware, is distinguished by a wide depression on the inner side of the rim. Of medium fabric, it presents a red slip. From Phase A of Period I. *Variant CXXIIIf*, of red ware, has its top flatly-bevelled. Of medium fabric, it preserves a red slip externally. From Phase A of Period I. *Variant*

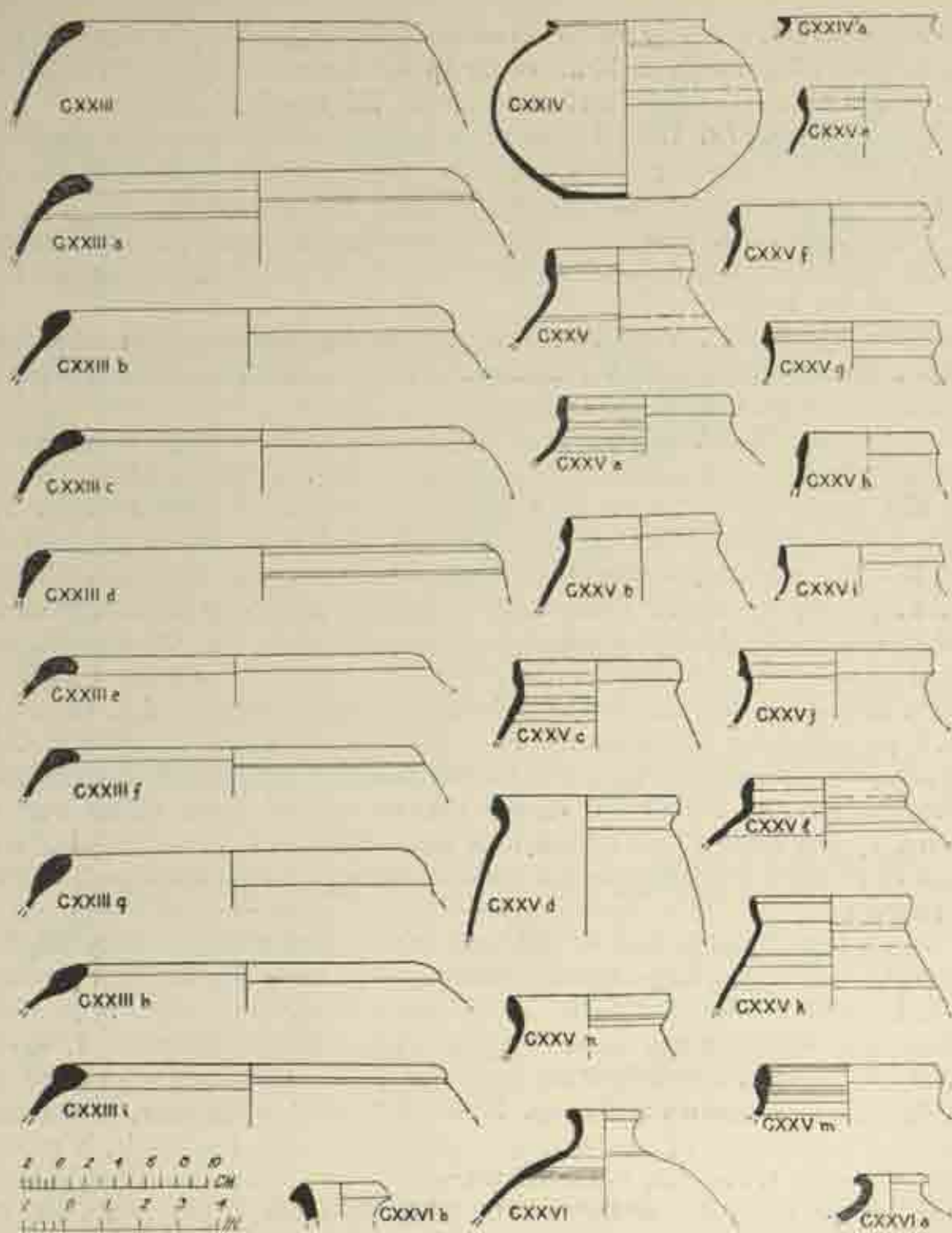


FIG. 16. Tilaura-kot: pottery from Period I (other wares)

CXXIIIg, of red ware, is distinguished by its elliptical rim. Of medium fabric, it is treated with a red slip. From Phase A of Period I. *Variant CXXIIIh*, of red ware, has a bud-shaped rim. Of medium fabric, it presents a red slip. From Pit 1. *Variant CXXIIIi*, of red ware, has an externally oval-collared and internally thickened rim. Of medium fabric, it has a red slip. From Pit 1.

Type CXXIV. Vase of grey ware with an inturned externally-clubbed rim, a globular body and a flat base. The inconspicuous neck is pierced with four holes presumably for suspension. Of very fine fabric and ashy-grey core, it is treated with a blackish-grey slip externally. From Pit 1. *Variant CXXIVa*, of grey ware, differs from the above by its rim being flat on the top. Of very fine fabric, it is treated with a blackish-grey slip. From Pit 1. Found only in grey ware, this type is rare.

Type CXXV. Vase of red ware with a high vertical externally-thickened and internally-grooved rim and a gradually-expanding profile which starts abruptly from the rim. There are wheel-marks on the body. Of fairly fine fabric, it is devoid of any slip and analogous to *Type XXXI* from Period III of Hastināpura. From Pit 1. *Variant CXXVa*, of red ware, differs from the above by a ridge on the outer side of the rim. Of fairly fine fabric, it is devoid of any slip. From Pit 1. *Variant CXXVb*, of red ware, differs from the main type by its tapering rim. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVc*, of red ware, differs from the preceding by its internally-thinning rim and the absence of the depression on the inner side of the rim. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVd*, of red ware, differs from the main type by its out-turned externally-thickened and bevelled rim. Of medium fabric, it is devoid of any slip and analogous to *Type XXXIb* from Period III of Hastināpura. From the rampart-filling. *Variant CXXVe*, of red ware, differs from the preceding by its vertical rim with a depression on the inner side. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVf*, of red ware, differs from the preceding by the absence of the depression. Of fairly fine fabric, it is devoid of any slip. From Pit 1. *Variant CXXVg*, of red ware, is distinguished by its ridged and sharpened rim. Of fairly fine fabric, it is devoid of any slip. From Phase B of Period I. *Variant CXXVh*, of red ware, differs from the preceding by its less pronounced ridge. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVi*, of red ware, has a vertical externally-thickened ridged rim with depression on both sides. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVj*, of red ware, differs from the preceding by its internally-thinning rim. Of fairly fine fabric, it is devoid of any slip. From Pit 1. *Variant CXXVk*, of red ware, differs from the main type by its inverted featureless rim. Of fairly fine fabric, it is devoid of any slip. From Pit 1. *Variant CXXVI*, of red ware, differs from the preceding by its pronouncedly-expanding profile. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVm*, of red ware, differs from the main type by its vertical bud-shaped rim. Of fairly fine fabric, it is devoid of any slip. From Phase A of Period I. *Variant CXXVn*,

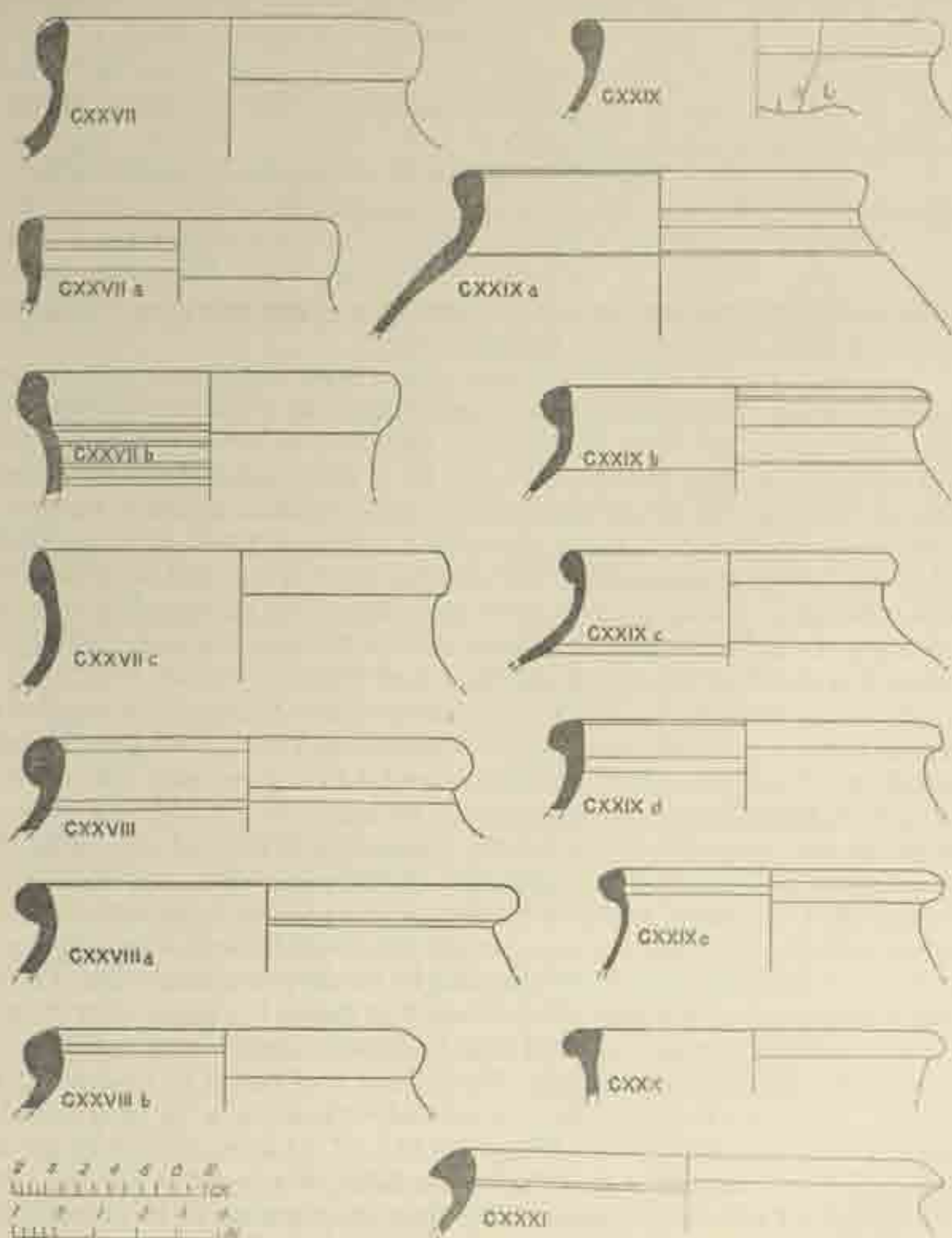


FIG. 17. Tilaura-kot: pottery from Period I (other wares)

of red ware, differs from the preceding by its out-turned rim with inconspicuous grooves on the outer side. From Phase A of Period I. This type is very common.

Type CXXVI. Vase of grey ware with a narrow mouth, an out-turned inconspicuously-thickened vertically-cut rim, a concave neck, a rib on the shoulder and a globular body. Of fine fabric, it is treated with a blackish-grey slip. From Phase B of Period I. *Variant CXXVIa*, of red ware, differs from the above by its clubbed rim. Of fairly fine fabric, it is devoid of any slip. From Pit 1. *Variant CXXVIb*, of red ware, differs from the main type by its obliquely-bevelled rim. Of fairly fine fabric, it is devoid of any slip and is analogous to *Type XL* from Period III of Hastināpura. From Phase A of Period I. This type is rare.

Type CXXVII. Jar of red ware with a wide mouth, a slightly out-turned externally oval-collared rim and a fairly-high concave neck. Of medium fabric, it is provided with a red slip turned black at places. From Phase A of Period I. *Variant CXXVIIa*, of red ware, differs from the above by its almost vertical oblongish-collared rim. Of medium fabric, it is provided with a red slip turned black at places. From Phase A of Period I. *Variant CXXVIIb*, of red ware, differs from the main type by its inverted rim. Of medium fabric, it is provided with a darkish-red slip turned black at places. From Phase A of Period I. *Variant CXXVIIc*, of red ware, differs from the main type by its conical externally-undercut rim. Of medium fabric, it is provided with a red slip turned black at places. From Pit 1. Analogous to *Type XXXVII* from Period III of Hastināpura, this fairly-common type was found in red ware alone.

Type CXXVIII. Jar of red ware with a wide mouth, a slightly out-turned round-collared rim and an oblique shoulder starting abruptly from the rim. Of coarse fabric, it is provided with a red slip. From Pit 1. *Variant CXXVIIIa*, of red ware, differs from the above by its partially flat-topped rim. Of medium fabric, it presents a darkish-red slip turned black at places. From Phase B of Period I. *Variant CXXVIIIb*, of red ware, differs from the main type by its obliquely-bevelled internally-grooved rim. Of coarse fabric, it is provided with a deep-red slip. From Pit 1. Found in red ware, this type is fairly common.

Type CXXIX. Jar of red ware with a wide mouth, a slightly out-turned round-collared rim and an inconspicuous neck gradually merging with the oblique shoulder. Of medium fabric, it presents a dark-red slip externally and bears three graffiti, one of which resembles the Brāhmī letter *pa* (pl. XXII, 10; p. 18). From Pit 1. *Variant CXXIXa*, of red ware, differs from the above by its vertical rim. It has a groove on the shoulder. Of medium fabric, it is provided with a red slip externally. From Phase B of Period I. *Variant CXXIXb*, of red ware, differs from the preceding by a groove on the outer side of the rim. Of medium fabric, it is provided with a red slip externally. From Phase B of Period I. *Variant CXXIXc*, of red ware, differs from the main type by its undercut rim. Of medium fabric, it is provided with a red slip externally. From Pit 1. *Variant CXXIXd*, of red ware, differs from the main type by its vertical bevelled rim. Of medium fabric,

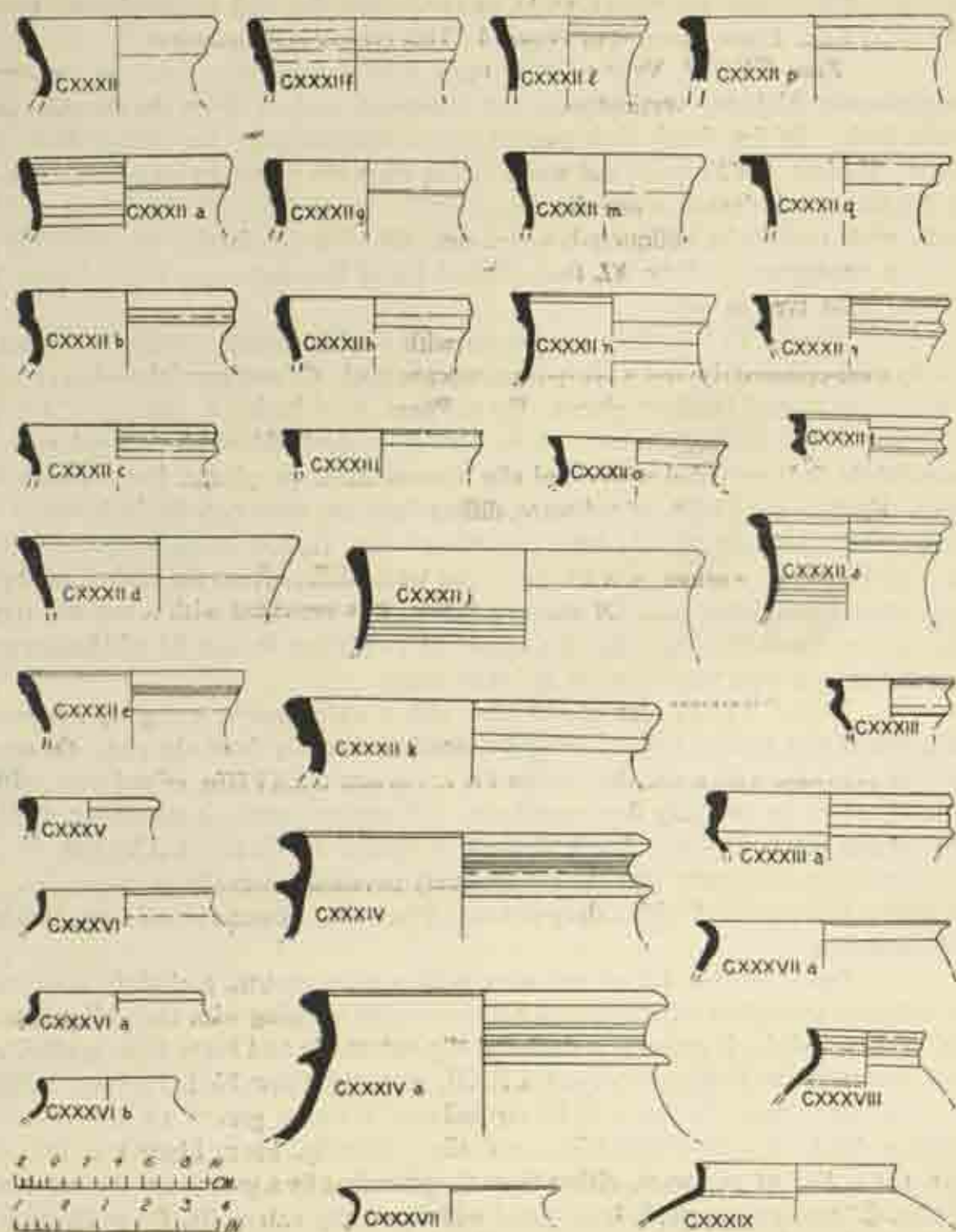


FIG. 18. Tilaura-kot: pottery from Period I (other wares)

it is provided with a red slip externally. From Pit 1. *Variant CXXIXe*, of red ware, differs from the preceding by a depression on the inner side of the rim and thin walls. Of medium fabric, it is provided with a red slip externally. From Pit 1. Found in red ware alone, this type is fairly common.

Type CXXX. Jar of red ware with a wide mouth, a vertical flat-topped externally-thickened and beaked rim and a straight neck. Of medium fabric, it is provided with a red slip turned black on the top. From Pit 1. Found in red ware alone, this type is not common.

Type CXXXI. Jar of red ware with a wide mouth, an out-turned beaked rim and an inconspicuous neck merging with the oblique shoulder. Of coarse fabric showing husk and mica, it is devoid of any slip at present. From Phase A of Period I. Found in red ware, this type is rare.

Type CXXXII. Vase of red ware with a splayed-out rim ridged externally and a concave neck. Of medium fabric, it is devoid of any slip and similar to *Type XIII* from Period II of Hastināpura. From Pit 1. *Variant CXXXIIa*, of red ware, has an out-turned rim and grooves internally. Of medium fabric, it presents a darkish-red slip. From Phase A of Period I. *Variant CXXXIIb*, of red ware, has an almost vertical rim with a depression on the inner side. Of coarse fabric, it is devoid of any slip. From Pit 1. *Variant CXXXIIc*, of red ware, differs from the main type by its partially-bevelled rim. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant CXXXIId*, of red ware, differs from the main type by its internally-thickened and bevelled rim and inconspicuous ridge. Of coarse fabric, it is devoid of any slip. From Phase B of Period I. *Variant CXXXIIf*, of red ware, differs from the preceding by its externally-grooved rim which is not thickened internally. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CXXXIIg*, of red ware, has a groove above the ridge. Of coarse fabric, it is provided with a red slip. From Phase A of Period I. *Variant CXXXIIh*, of red ware, differs from the main type by its vertical rim and inconspicuous ridge which is rounded. Of medium fabric, it presents a red slip. From Pit 1. *Variant CXXXIIi*, of red ware, differs from the main type by its slightly-inturned externally-bevelled rim with a depression above the ridge. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CXXXIIj*, of red ware, has a vertical flat-topped rim with a depression above the ridge. Of medium fabric, it bears a red slip. From Phase B of Period I. *Variant CXXXIIk*, of red ware, is distinguished by its slightly externally-thickened rim and a very wide neck grooved internally. Of medium fabric, it is provided with a red slip. From Phase A of Period I. *Variant CXXXIIl*, of red ware, differs from the preceding by a cordon which has taken the place of the ridge. Of coarse fabric, it presents a red slip. From the rampart-filling. *Variant CXXXIIm*, of red ware, differs from the main type by its out-turned flat-topped rim with a groove above the ridge and high neck. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant CXXXIIn*, of red ware, differs from the main type by its almost vertical externally-thickened flat-topped rim. Of medium

fabric, it is provided with a red slip. From Phase B of Period I. *Variant CXXXIIn*, of red ware, differs from the preceding in having the upper part of the rim thickened internally. Of medium fabric, it is provided with a red slip. From Pit I. *Variant CXXXIIo*, of red ware, differs from *Variant CXXXIIIm* by its short neck. Of medium fabric, it is devoid of any slip. From Phase B of Period I. *Variant CXXXIIp*, of red ware, differs from the main type by its almost vertical flat-topped clubbed rim. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CXXXIIq*, of red ware, differs from the preceding in having the upper part of the rim pronouncedly ledged. Of medium fabric, it presents a red slip. From the rampart-filling. *Variant CXXXIIr*, of red ware, differs from the main type by its almost vertical rim with a ledge-like projection at the top externally and a prominent ridge. Of medium fabric, it is provided with a red slip. From Pit I. *Variant CXXXIIs*, of red ware, differs from *Variant CXXXIIIm* by an additional ridge externally. Of medium fabric, it is provided with a red slip. From Pit I. *Variant CXXXIIIt*, of red ware, differs from the preceding by its grooved top. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is very common.

Type CXXXIII. Vase of red ware with a flaring rim and a ridged neck having a depression on the inner side. Of medium fabric and smoky core, it presents a red slip. From Pit I. *Variant CXXXIIIa*, of red ware, differs from the above in having an inturned externally-beaded rim with a groove below. Of medium fabric, it bears a red slip. From Phase A of Period I. Found in red ware alone, this type is rare.

Type CXXXIV. Vase of red ware with a flaring clubbed rim and a high inconspicuously-concave neck distinguished by a prominent ledge and grooves. Of coarse fabric, it presents a red slip. From Pit I. *Variant CXXXIVa*, of red ware, differs from the above by its oblique ledge, which is concave below. Of coarse fabric, it presents a red slip. From Pit I. Restricted to the red ware, this rare type is not found in the regular stratified deposit of Phase A of Period I.

Type CXXXV. Vase of red ware with a slightly out-turned externally-thickened rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I. This rare type is found in red ware alone.

Type CXXXVI. Vase of red ware with a vertical externally-thickened and obliquely-bevelled rim, a short vertical neck and an oblique shoulder. Of medium fabric, it is provided with a darkish-red slip. From Phase A of Period I. *Variant CXXXVIa*, of red ware, differs from above by a depression on the inner side of the rim and a shorter neck. Of medium fabric, it is devoid of any slip. From Phase B of Period I. *Variant CXXXVIb*, of red ware, differs from the main type by its out-turned oval rim. Of medium fabric, it is devoid of any slip. From Phase A of Period I. Found in red ware alone, this type is not common.

Type CXXXVII. Vase of red ware with a wide mouth, a flaring featureless rim and a narrow concave neck. Of medium fabric, it is provided with a darkish-red slip.

From Phase B of Period I. *Variant CXXXVIIa*, of red ware, differs from the above by its internally-sharpened rim and a bluntly-carinated neck. Of medium fabric and somewhat analogous to *Type XIXa* from Period II of Hastināpura, it is provided with a red slip. From Phase A of Period I. This type is rare.

Type CXXXVIII. Small vase of red ware with an out-turned featureless rim, a vertical grooved neck and an oblique shoulder. Of medium fabric and with black patches in the core, it bears a red slip. From Phase A of Period I. This type is rare and found in red ware alone.

Type CXXXIX. Vase of red ware with an out-turned featureless rim, a short vertical neck and a globular profile. Of medium fabric, it is provided with a red slip. From Pit 1. This type is rare.

Type CXL. Small vase of grey ware with an out-turned featureless rim and a high concave neck bluntly carinated at the base. With fine grooves on the inner side of the neck and of very fine fabric, it presents a jet-black slip. From Phase A of Period I. *Variant CXLa*, of grey ware, differs from the above by its obliquely-bevelled rim and a gradually-expanding neck which has an external groove near its base. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant CXLb*, of grey ware, differs from the main type by its flaring clubbed rim. Of fine fabric, it presents a black slip. From Phase A of Period I. *Variant CXLc*, of grey ware, differs from the main type by its horizontally-drooping rim and a bead at the junction of the neck and shoulder. Of fine fabric, it is provided with a jet-black slip. From Pit 1. *Variant CXLd*, of grey ware, differs from the preceding by its horizontally splayed-out sharpened rim with a weak rib below, a gradually-expanding neck and an inconspicuously-ledged shoulder. Of fine fabric, it is provided with a black slip externally. From Pit 1. *Variant CXLe*, of grey ware, differs from the main type by its flaring rim and gradually-expanding neck. Of very fine fabric, it is provided with a black slip externally. From Phase A of Period I. *Variant CXLf*, of grey ware, differs from the preceding by its flaring inconspicuously-beaded rim. Of fine fabric, it is treated with a grey slip. From Phase A of Period I. *Variant CXLg*, of grey ware, differs from the main type by its beaded rim. Of fine fabric, it presents a black slip. From Pit 1. *Variant CXLh*, of grey ware, differs from the main type by its nail-headed rim. Of fairly fine fabric, it is treated with a darkish-grey slip. From Phase B of Period I. *Variant CXLi*, of grey ware, differs from the preceding by its obliquely-bevelled rim. Of very fine fabric, it is provided with a black slip. From Phase A of Period I. *Variant CXLj*, of grey ware, differs from the main type by its externally-thickened and undercut rim. Of fine fabric, it is treated with a grey slip externally. From Phase A of Period I. *Variant CXLk*, of grey ware, differs from the main type by its externally-beaked rim. Of fine fabric, it is provided with a black slip. From Pit 1. *Variant CXLl*, with a globular profile, differs from the main type by its vertical neck. Of fine fabric, it is treated with a slip which has turned partly chocolate and partly black due to firing, the surface immediately below the slip being pinkish and the core mostly grey. From Pit 1. *Variant CXLm*, of grey ware,

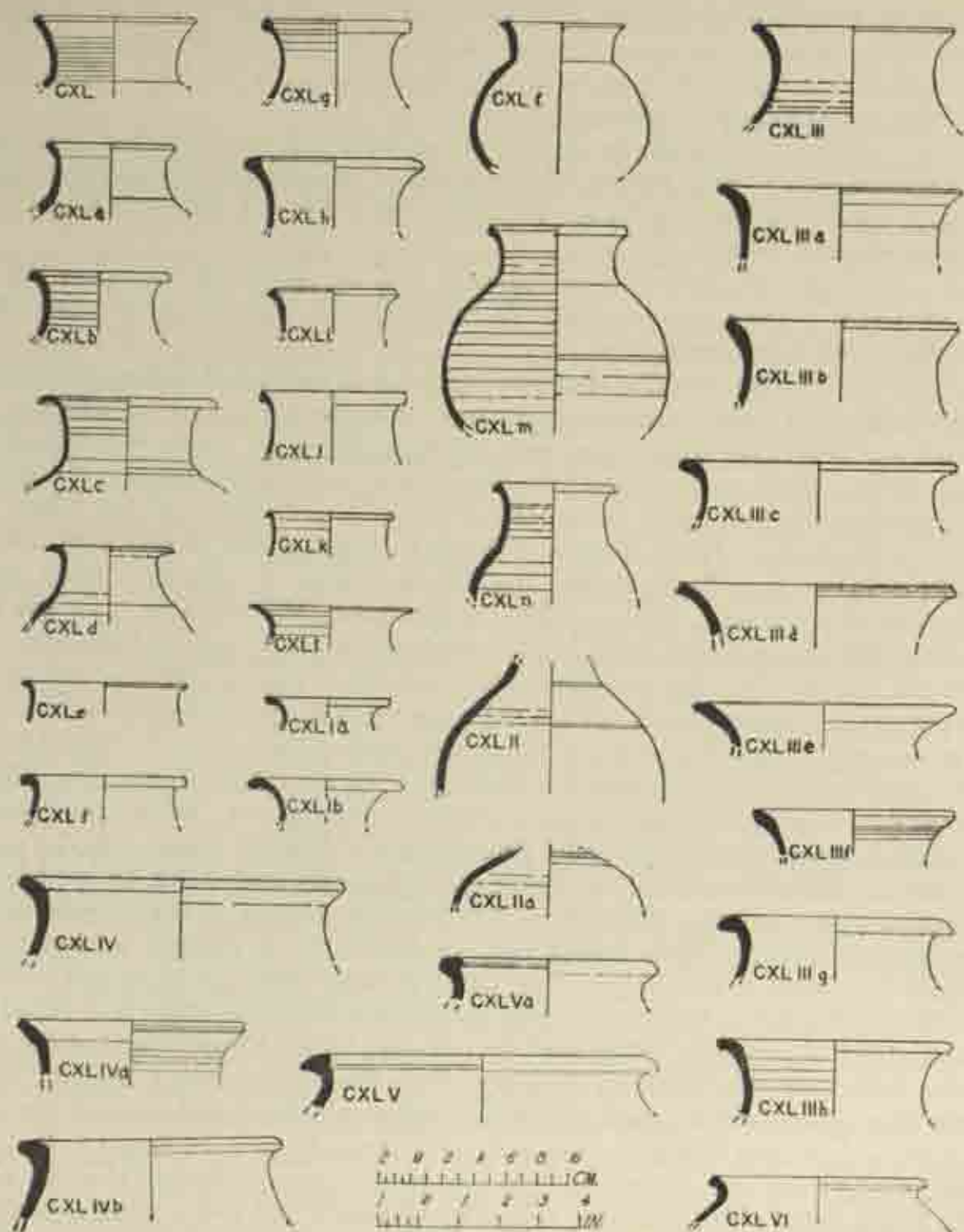


FIG. 19. Tilaura-kot: pottery from Period I (other wares)

differs from the main type by its externally-thickened and bevelled rim and has a globular body bearing prominent striations. Of fine fabric, it presents a black slip. From Pit 1. *Variant CXLi*, of grey ware, differs from the preceding by its undercut rim and less bulging profile. Of fine fabric, it has a black slip externally. From Phase A of Period I. Found mostly in grey ware, this type is fairly common.

Type CXLII. Small vase of grey ware with a flaring featureless rim and a short neck. Of fine fabric, it is treated with a blackish-grey slip externally. From Phase A of Period I. *Variant CXLIIa*, of grey ware, differs from the above by its externally thickened rim. Of fine fabric, it is treated with a darkish-grey slip. From Pit 1. *Variant CXLIIb*, of dull-red ware, is distinguished by an externally-collared rim. Of fine fabric and greyish core, it is devoid of any slip at present. From Pit 1.

Type CXLIII. Vase of red ware with a narrow neck and a globular profile. Of fine fabric, it is provided with a bright-red slip externally. From Pit 1. *Variant CXLIIIa*, of grey ware, has a cordon on the shoulder. Of fairly fine fabric, it presents a black slip externally. From Pit 1. This type is not common.

Type CXLIII. Vase of dull-red ware with a flaring featureless rim and a high concave neck gradually merging with the oblique shoulder. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CXLIIIa*, of red ware, differs from the above by its internally-thinning rim. Of coarse fabric and with blackish patches, it is devoid of slip at present. From Phase A of Period I. *Variant CXLIIIb*, of red ware, differs from the preceding by its externally-bevelled rim. Of medium fabric, it presents a red slip. From Pit 1. *Variant CXLIIIc*, of red ware, differs from the main type by its thickened rim. Of medium fabric, it presents a red slip. From the top level of Phase B of Period I. *Variant CXLIIId*, of red ware, differs from the main type by its grooved rim. Of medium fabric, it presents a red slip. From Phase B of Period I. *Variant CXLIIIe*, of red ware, has a thickened and grooved rim. Of medium fabric, it is provided with a red slip externally. From Phase A of Period I. *Variant CXLIIIf*, of red ware, differs from the main type by its externally-thickened rim. Of coarse fabric, it presents a red slip. From Phase A of Period I. *Variant CXLIIIg*, of red ware, differs from the main type by its externally-clubbed rim. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CXLIIIh*, of red ware, differs from the main type by its slightly-thickened rim near the base. Of medium fabric, it presents a red slip. From Phase A of Period I. Found in red ware, this common type is similar to *Type XXXII* from Period III of Hastināpura.

Type CXLIV. Vase of red ware with a splayed-out rim, thickened near the base, and a gradually-expanding neck. Of coarse fabric, it is provided with a red slip. From the top level of Phase B of Period I. *Variant CXLIVa*, of red ware, differs from the above by its grooved rim and grooved neck. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CXLIVb*, of red ware, differs from the main type by its clubbed rim. Of coarse fabric, it is provided with a red slip. From Pit 1. Found in red ware, this type is fairly common.

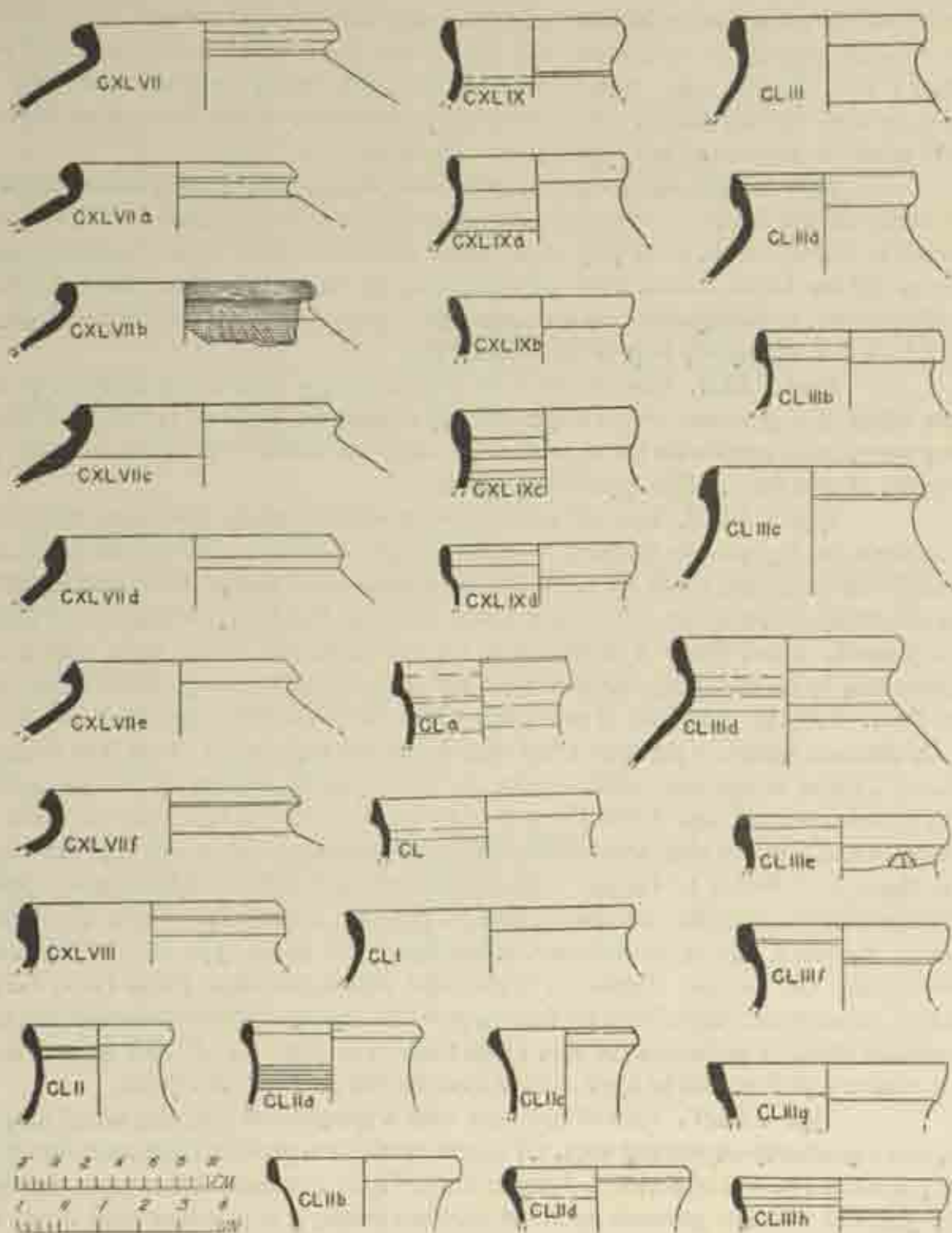


FIG. 20. Tilaura-kot: pottery from Period I (other wares)

Type CXLV. Vase of red ware with an out-turned nail-headed rim with a groove on the inner side, a short neck and an oblique shoulder. Of medium fabric, it is provided with a red slip. From Pit 1. In *Variant CXLVa*, of red ware, the rim is slightly rounded externally. Of medium fabric, it is provided with a red slip turned black internally on the rim. From Pit 1. Found in red ware, this rare type is analogous to *Type XXXVIII* from Period III of Hastināpura.

Type CXLVI. Vase of red ware with a splayed-out externally-thickened rim, a short neck and an oblique shoulder. Of medium fabric, it is provided with a red slip. From Pit 1. Found in red ware, this type is rare.

Type CXLVII. Vase of dull-red ware with an out-turned externally-thickened rim, an inconspicuous neck and an oblique shoulder. Of coarse fabric showing husk, it is devoid of any slip at present. From the rampart-filling. *Variant CXLVIIa*, of dull-red ware, differs from the preceding by its ledged shoulder. Of coarse fabric showing husk, it is devoid of any slip at present. From Pit 1. *Variant CXLVIIb*, of dull-red ware, differs from the main type by its externally-rounded undercut rim and is distinguished by oblique combings on the shoulder. Of coarse fabric showing husk, it is devoid of any slip at present. From Pit 1. *Variant CXLVIIc*, of dull-red ware, differs from the main type by its ridged rim. Of coarse fabric showing husk, it is devoid of any slip at present. From Pit 1. *Variant CXLVIId*, of dull-red ware, has an almost vertical externally obliquely-bevelled rim and is without a well-defined neck. Of coarse fabric showing husk, it is devoid of any slip at present. From Pit 1. *Variant CXLVIIe*, of dull-red ware, differs from the preceding by its out-turned rim and inconspicuous neck. Of coarse fabric showing husk, it is devoid of any slip at present. From the rampart-filling. *Variant CXLVIIf*, of dull-red ware, differs from the preceding by a depression on the bevelled rim. Of coarse fabric showing husk, it is devoid of any slip. From Pit 1. Restricted to red ware, this type is not very common and it is not found in the regular stratified deposit of Phase A of Period I.

Type CXLVIII. Vase of dull-red ware with an almost vertical externally-thickened grooved and ridged rim and an inconspicuous neck. Of coarse fabric showing husk, it is devoid of any slip. From Phase A of Period I. Found in red ware alone, this type is not common.

Type CXLIX. Vase of red ware with a vertical externally-thickened rim, gradually merging with the inconspicuously-concave neck, and an oblique shoulder. Of medium fabric, it is provided with a red slip externally and on the inner side of the rim. From Phase A of Period I. *Variant CXLIXa*, of red ware, differs from the above by its internally-thinning rim. Of medium fabric, it is provided with a red slip externally and on the inner side of the rim. From Phase A of Period I. *Variant CXLIXb*, of red ware, differs from the main type by its out-turned rim. Of medium fabric, it is provided with a red slip externally. From Phase A of Period I. *Variant CXLIXc*, of red ware, differs from the preceding by its internally-thickened rim. Of medium fabric, it is provided with a red slip turned black at places due to firing. From Phase A of Period I. *Variant CXLIXd*,

of red ware, differs from the main type by a prominent depression on the inner side of the rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware, this type is fairly common.

Type CL. Vase of red ware with an out-turned externally-thickened and ridged rim and a high inconspicuously-concave neck. Of medium fabric, it is provided with a red slip externally. From Phase A of Period I. *Variant CLa*, of red ware, differs from the above by its vertical rim with a depression on the inner side. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is not very common.

Type CLI. Vase of red ware with a wide mouth, an out-turned bluntly-sharpened rim with a weak ridge externally and an inconspicuously-concave neck. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is rare.

Type CLII. Vase of red ware with an out-turned externally-thickened rim, gradually merging with the high concave neck. Of fairly fine fabric, it is devoid of any slip at present. From Pit 1. *Variant CLIIa*, of red ware, has a depression on the inner side of the rim. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLIIb*, of red ware, differs from the preceding by its vertical rim. Of fairly fine fabric, it is provided with a red slip. From Phase A of Period I. *Variant CLIIc*, of red ware, differs from the main type by its bevelled rim. Of fairly fine fabric, it presents a red slip. From Phase B of Period I. *Variant CLIIId*, of red ware, differs from the main type by its inturned grooved rim. Of medium fabric, it is provided with a red slip. From Pit 1. This type was found in red ware alone.

Type CLIII. Vase of red ware with an almost vertical externally-collared rim, an inconspicuously-concave neck gradually merging with the oblique shoulder. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLIIIa*, of red ware, differs from the above by its out-turned externally-thinning rim. Of medium fabric, it is provided with a red slip externally. From Pit 1. *Variant CLIIIb*, of red ware, differs from the preceding by its vertical rim with a depression on the inner side. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant CLIIIc*, of red ware, differs from *Variant CLIIIa* by its inverted rim. Of medium fabric, it is devoid of any slip at present. From Pit 1. *Variant CLIIId*, of red ware, differs from the main type by its out-turned grooved rim. Of medium fabric, it is provided with a red slip externally and on the upper part of the rim. From Phase A of Period I. *Variant CLIIIe*, of red ware, differs from the main type by a depression on the inner side of the rim. On the outer side of the neck occurs a graffito which resembles the Brāhmī letter *śa* (pl. XXII, 7; p. 17). Of medium fabric, it bears a red slip externally and on the inner side of the rim. From Phase A of Period I. *Variant CLIIIf*, of dull-red ware, differs from the main type by its slightly out-turned flat-topped internally-grooved rim. Of medium fabric, it presents a red slip. From Phase A of Period I. *Variant CLIIIg*, of red ware, differs from the preceding by its

oblong-collared rim. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLIIIh*, of red ware, differs from *Variant CLIIIg* by the conical tip of the rim. Of fairly fine fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is common.

Type CLIV. Vase of dull-red ware with an out-turned externally-clubbed and internally-thickened rim and an almost vertical high neck. Of coarse fabric, it is treated with a slip which has turned blackish. From Pit 1. This type is similar to *Type XXXVb* from Period III of Hastināpura. *Variant CLIVa*, of red ware, differs from the above by its bevelled rim. Of coarse fabric, it is devoid of any slip. From Pit 1. *Variant CLIVb*, of red ware, differs from the main type by the inconspicuous ridge at the outer end of the rim. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLIVc*, of red ware, differs from the main type by its flaring rim with an inconspicuous groove on the outer side. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CLIVd*, of red ware, differs from the preceding by its undercut rim. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLIVe*, of red ware, differs from the main type by its vertically bevelled rim. Of medium fabric, it presents a red slip turned black at places. From Phase A of Period I. *Variant CLIVf*, of red ware, differs from the main type by its vertical rim. Of medium fabric, it is provided with a deep-red slip externally. From Phase B of Period I. *Variant CLIVg*, of red ware, differs from the preceding by its undercut rim. Of coarse fabric, it presents a red slip. From Phase A of Period I. *Variant CLIVh*, of red ware, differs from *Variant CLIVf* by a depression on the inner side of the rim. Of coarse fabric, it is provided with a red slip. From Phase A of Period I. *Variant CLIVI*, of red ware, differs from *Variant CLIVf* by its grooved flatly-bevelled rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I. *Variant CLIVj*, of red ware, differs from *Variant CLIVf* by the bluntly-sharpened outer end of the rim. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CLIVk*, of grey ware, differs from *Variant CLIVh* by its inconspicuously-bevelled rim. Of medium fabric, it presents a black slip. From Phase A of Period I. Found mostly in red ware and rarely in grey ware, this type is fairly common.

Type CLV. Vase of red ware with a flaring grooved rim and a high vertical neck. Of coarse fabric, it is provided with a red slip. From Pit 1. *Variant CLVa*, of red ware, differs from the above by its splayed-out rim. Of medium fabric, it presents a red slip. From Pit 1. *Variant CLVb*, of red ware, differs from the preceding by a ridge on the inner side of the rim. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CLVc*, of red ware, differs from *Variant CLVa* by its gradually-thinning rim. Of medium fabric, it is provided with a red slip. From Phase B of Period I. *Variant CLVd*, of red ware, differs from the main type by its undercut rim. Of coarse fabric, it is provided with a red slip turned black at places. From Phase A of Period I. *Variant CLVe*, of red ware, is distinguished by a prominent depression on the inner side of the rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I.

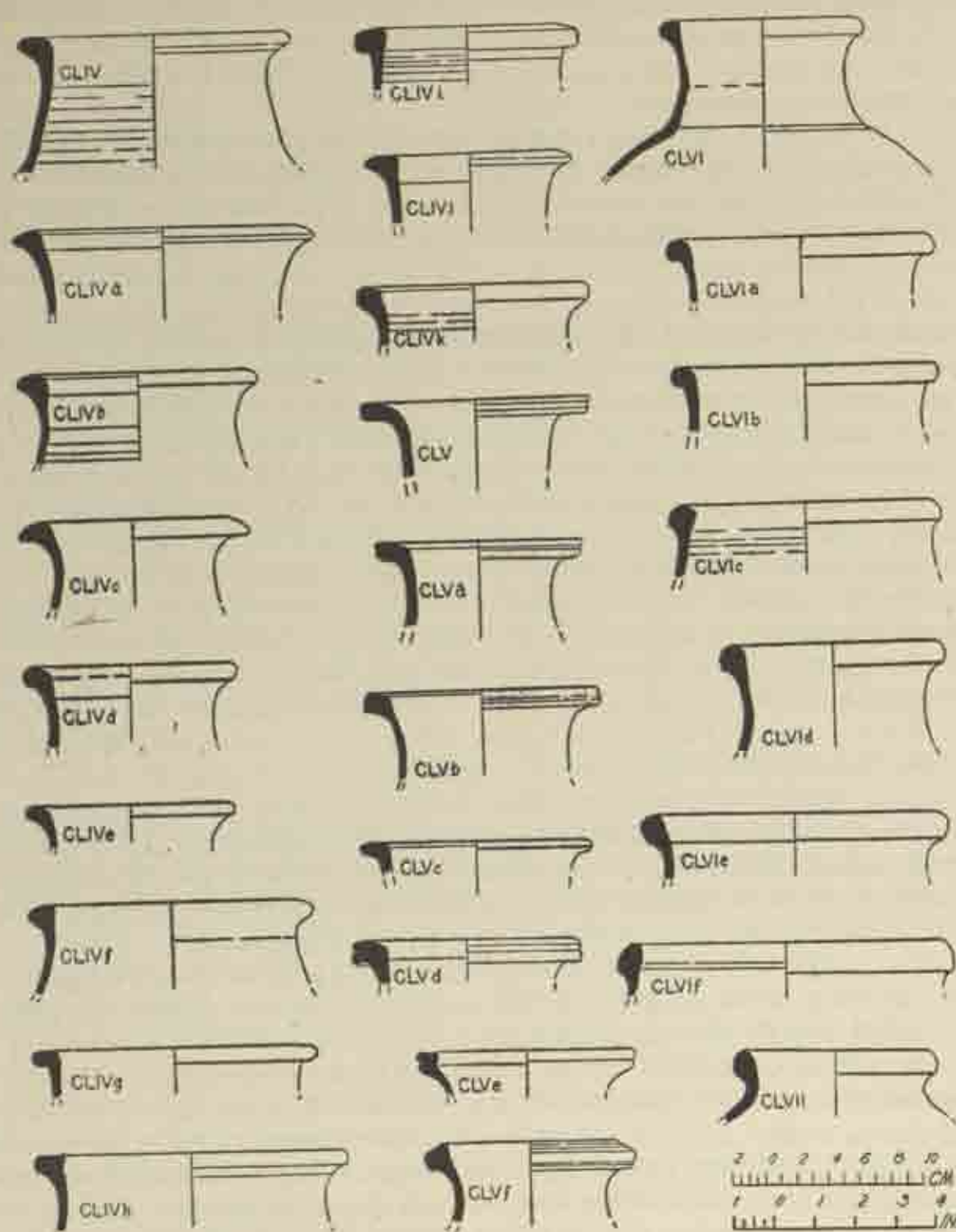


FIG. 21. Tilaura-kot: pottery from Period I (other wares)

Variant CLVf, of red ware, has an out-turned rim with two inconspicuous grooves on the top. Of medium fabric, it is provided with a red slip turned blackish at places. From Pit 1. Found in red ware, this type is not very common.

Type CLVI. Vase of red ware with a vertical externally-thickened rim, a high vertical neck and a gradually-expanding shoulder. Of medium fabric, it is provided with a red slip. From Pit 1. *Variant CLVla*, of red ware, differs from the above by its out-turned rim. Of medium fabric, it is provided with a red slip turned black at places. From Phase A of Period I. *Variant CLVlb*, of red ware, differs from the main type by its undercut rim. Of medium fabric, it is provided with a red slip turned black internally. From Phase B of Period I. *Variant CLVlc*, of red ware, differs from the main type by its inturned inconspicuously-ridged rim. Of medium fabric, it is provided with a red slip turned blackish at places. From Phase A of Period I. *Variant CLVld*, of red ware, differs from the preceding by its vertical rim. Of medium fabric, it presents a red slip turned black at places. From Pit 1. *Variant CLVle*, of red ware, differs from the preceding by its out-turned rim. Of coarse fabric, it is provided with a red slip. From Pit 1. *Variant CLVlf*, of red ware, differs from the main type by its inturned elongated rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is very common.

Type CLVII. Vase of red ware with an out-turned oval rim, a short neck and a globular profile. Of coarse fabric, it bears a red slip. From Pit 1.

Type CLVIII. Vase of red ware with an out-turned nail-headed rim, a high neck and a convex shoulder. Of medium fabric, it is provided with a red slip externally and on the rim and upper part of the neck internally. This type is analogous to *Variant XXXVa* from Period III of Hastināpura. From Phase B of Period I. *Variant CLVIIIa*, of red ware, has the inner side of the rim slightly rounded. Of medium fabric, it is provided with a red slip externally. From Pit 1. *Variant CLVIIIb*, of red ware, differs from the preceding by a depression on the inner side of the rim. Of medium fabric, it is provided with a red slip externally and on the rim and the upper part of the neck internally. From Pit 1. *Variant CLVIIIc*, of red ware, has a bevelled rim. Of medium fabric, it is provided with a red slip externally and on the rim and upper part of the neck internally. From Pit 1. Found in red ware, this type is fairly common.

Type CLIX. Vase of red ware with a vertical grooved nail-headed rim and a gradually-expanding neck. Of medium fabric, it is provided with a red slip turned blackish at places. From Phase A of Period I. *Variant CLIXa*, of red ware, differs from the above by its undercut rim. Of medium fabric, it is provided with a red slip externally and on the rim and upper part of the neck internally. From Phase A of Period I. Found in red ware, this type is not common.

Type CLX. Vase of red ware with an out-turned externally-collared rim having two grooves and a concave neck. Of coarse fabric, it is devoid of any slip at present. This type is analogous to *Variant XXXIIIb* from Period III of Hastināpura.

From Pit 1. *Variant CLXa*, of red ware, has a single groove. Of coarse fabric, it presents a red slip. From Pit 1. Found in red ware, this type is not common.

Type CLXI. Vase of red ware with a flaring externally-thickened and bevelled rim and a narrow neck. Of medium fabric, it is provided with a red slip. From Phase A of Period I. *Variant CLXIa*, of red ware, is distinguished by a ridge. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware alone, this type is not very common.

Type CLXII. Vase of red ware with a vertical externally-beaked rim. Of coarse fabric, it is provided with a red slip turned black at places. From Phase B of Period I. *Variant CLXIIa*, of red ware, differs from the above by its flaring rim. Of medium fabric, it is provided with a red slip turned black at places. From Phase A of Period I. Found in red ware, this type is not very common.

Type CLXIII. Vase of dull-red ware with a fairly wide mouth, a flaring externally-thickened and bevelled rim, a concave neck and a gradually-expanding shoulder. Of coarse fabric, it is provided with a red slip externally and on the rim and neck internally. From Pit 1.

Type CLXIV. Vase (?) of red ware with an out-turned externally oval-collared and internally-thickened rim. Of coarse fabric, it is provided with a red slip. From Pit 1. Found in red ware, this type is rare.

Type CLXV. Vase of red ware with a wide mouth, a flaring featureless rim, a short concave neck and a convex shoulder. Its shoulder is incised with two wavy lines externally. Of tolerably fine fabric, it is provided with a red slip. From the top of the rampart-filling. *Variant CLXVa*, of red ware, with a globular body, has a depression on the top of the rim. Decorated with oblique incisions within four sets of double semicircular incised line, its shoulder has four perforations. Of fairly fine fabric, it bears a red slip. From the top of the rampart-filling. Confined to red ware, this rare type was not found in the regular stratified deposit of Period I.

Type CLXVI. Vase of red ware with a flaring externally-thickened rim and a concave neck. Of medium fabric, it is provided with a red slip externally and on the rim and upper part of the neck internally. From Phase B of Period I. *Variant CLXVIa*, of red ware, has its rim obliquely bevelled. Of medium fabric, it presents a red slip externally. From Phase B of Period I. *Variant CLXVIb*, of red ware, differs from the preceding by an external ridge on the rim. Of medium fabric, it is provided with a red slip externally. From Pit 1. *Variant CLXVIc*, of red ware, differs from the main type by its undercut rim. Of medium fabric, it is provided with a red slip. From Phase A of Period I. Found in red ware, this type is fairly common.

Type CLXVII. Vase of grey ware with a vertical externally oval-collared rim. Of medium fabric, it is treated with a blackish slip. From Phase A of Period I. *Variant CLXVIIa*, of red ware, differs from the above by its out-turned rim. Of medium fabric, it is provided with a red slip. From Pit 1.

Type CLXVIII. Fragment of a curious oval-shaped vessel, solitary specimen of its kind, with a handle. Presumably of special use, it appears to have been made out of the half of a wheel-turned pot, sliced vertically. The luted handle has an upward rise. As only a part of the vessel is preserved, it is not known if there was a corresponding handle on the opposite side. The possibility of its joining the opposite side also cannot be entirely ruled out. Of medium fabric and red ware, it is provided with a deep-red slip. From the top of the rampart-filling.

Type CLXIX. Fragment of a bottle-necked vase (?) with a vertical featureless rim and a high narrow vertical neck. Of medium fabric and red ware, it is provided with a red slip. From the top of the rampart-filling. This rare type is not found in the regular stratified deposit of Period I.

Type CLXX. Fragment of a peculiar vessel, solitary specimen of its kind, with a nail-headed rim having incised strokes on top. The exact shape of the vessel, which appears to have been spouted, can not be determined from the extant part. The rim has a rise at one place perhaps to act as a handle. Of coarse fabric and red ware, it is provided with a red slip. From Pit I.

Type CLXXI. Fragment of a perforated vessel of red ware with an out-turned internally obliquely-bevelled undercut rim and receding sides bearing a hole. Of coarse fabric showing husk, it is devoid of any slip. From Pit I.

Type CLXXII. Lower portion of a strainer (?) of red ware with an inconspicuously button-base containing perforations. Of medium fabric, it is provided with a red slip. From Phase B of Period I. Similar vessels with perforated flat bases are also available.

Type CLXXIII. Vase (?) of red ware with a vertical slightly-thickened rim and an inconspicuous neck. Of coarse fabric, it is provided with a red slip. From Phase B of Period I. Found in red ware alone, this type is rare.

C. MISCELLANEOUS POTTERY

Figs. 23 and 24 illustrate the miscellaneous sherds found on the surface and in layers 1 and 2. The fabric of these sherds ranges from medium to coarse. All the sherds are of red ware except the one ascribed to *Type III*. This particular sherd, picked up on the surface, is of the grey ware and for that reason might have belonged to Period I, though such a type was not met with in the excavated pottery of Period I. At Hastināpura this shape occurs in Period IV (early second century B. C. to the end of the third century A. D.). The representation of a water-flask of this shape in the hands of several Brahmanical and Buddhist deities is fairly widespread in ancient sculptures and reliefs, particularly of the Kushān and the Gupta periods.

Of the nineteen types listed here, *Types I, II, III* and *IV* are respectively analogous to *Types I, XIII, XV* and *XVI* from Period IV of Hastināpura, while *Types XI,*

XIIa, *XIII*, *XIV*, *XVII*, *XVIII* and *XIX* are similar to either the main types or variants of *Types XI*, *XV*, *XVIII*, *XIX*, *XXVI*, *XXIV* and *XXX* from Kodan.

Among the remaining forms, the most distinctive is *Type V*, presumably a cooking-pot, with a globular profile and triangular handles in continuation of the rim. The shape of this kind of vessels differs from that of *Type 67* with triangular handles from Stratum I of Ahichchhatra. This type is fairly common among the surface-sherds from Lumbini (p. 204), Nipania (p. 207), Pipri (p. 209), Kadzahawa (p. 212), Lamtiya (p. 215), Sisania (p. 216) and Bamhni (p. 218). Kadzahawa is literally strewn with this type of vessels; some of the handles here are truncated triangles with sides slightly concave for easy grip. Banarasia (District Gorakhpur, India) and Ganwari (adjoining Piprahwa, District Basti, India) also yielded similar form. One of the sherds from Ganwari preserves soot on the mica-dusted lower part of the outer side. A second sherd from the same site and one from Pipri have a conspicuous perforation through the triangular handle. Another handle from Pipri bears incised lines on the top.

Seemingly associated with *Type V* are *Types VI*, *VII* with its variant and *Type VIII* with its variants *a*, *c* and *d*, as the very sites yielding *Type V* also furnished specimens of these three types as well, all characterized by thick coarse fabric. These three types and also *Type V* are conspicuous by their absence not only in the pottery of Kodan, Sonagarh (p. 219), Sirinagra (p. 222) and Saina-Maina (p. 221) but also at sites like Piprahwa (p. 226), Sihokhor (p. 227), Daldalha (p. 226), Dohni (p. 227), Bijua (p. 225), Patharkot (p. 224), Chaganth (p. 223) and Patkahawa (p. 224), the pottery of which is later than that of Kodan. From this it may be presumed that this four types are earlier than the pottery of Kodan.

The drawn specimens on figs. 23 and 24 are listed below.

Type I. Bowl of red ware with a vertical featureless rim and receding sides. Of medium fabric, it is devoid of any slip. From layer 2. This type is analogous to *Type I* from Period IV of Hastināpura. *Variant Ia* is a miniature bowl of red ware with an out-turned featureless rim, receding sides and a flat thickened base. Of medium fabric, it is devoid of any slip. From layer 2.

Type II. Lid of red ware with a flattened base and a central cup, the latter mostly missing. Of medium fabric, it is devoid of any slip at present. From layer 2. *Variant IIa*, of red ware, preserves the lower part of the inkpot-like central cup. The cup has an oblique shoulder and an almost straight body. Of medium fabric, it is devoid of any slip at present. From the surface. *Variant IIb*, of red ware, has a rounded base. The central cup has an almost vertical featureless rim and a gradually-expanding body. Of medium fabric, it is devoid of any slip. From the surface. *Variant IIc*, of red ware, has an out-turned bevelled rim, receding sides and a sagger base. The central cup has a vertical internally-thinning rim and an oblique shoulder. Of medium fabric, it is devoid of any slip at present. From the surface. *Variant IId*, of red ware, differs from the preceding by its flattened base and the out-turned featureless rim of the cup. Of medium fabric, it is

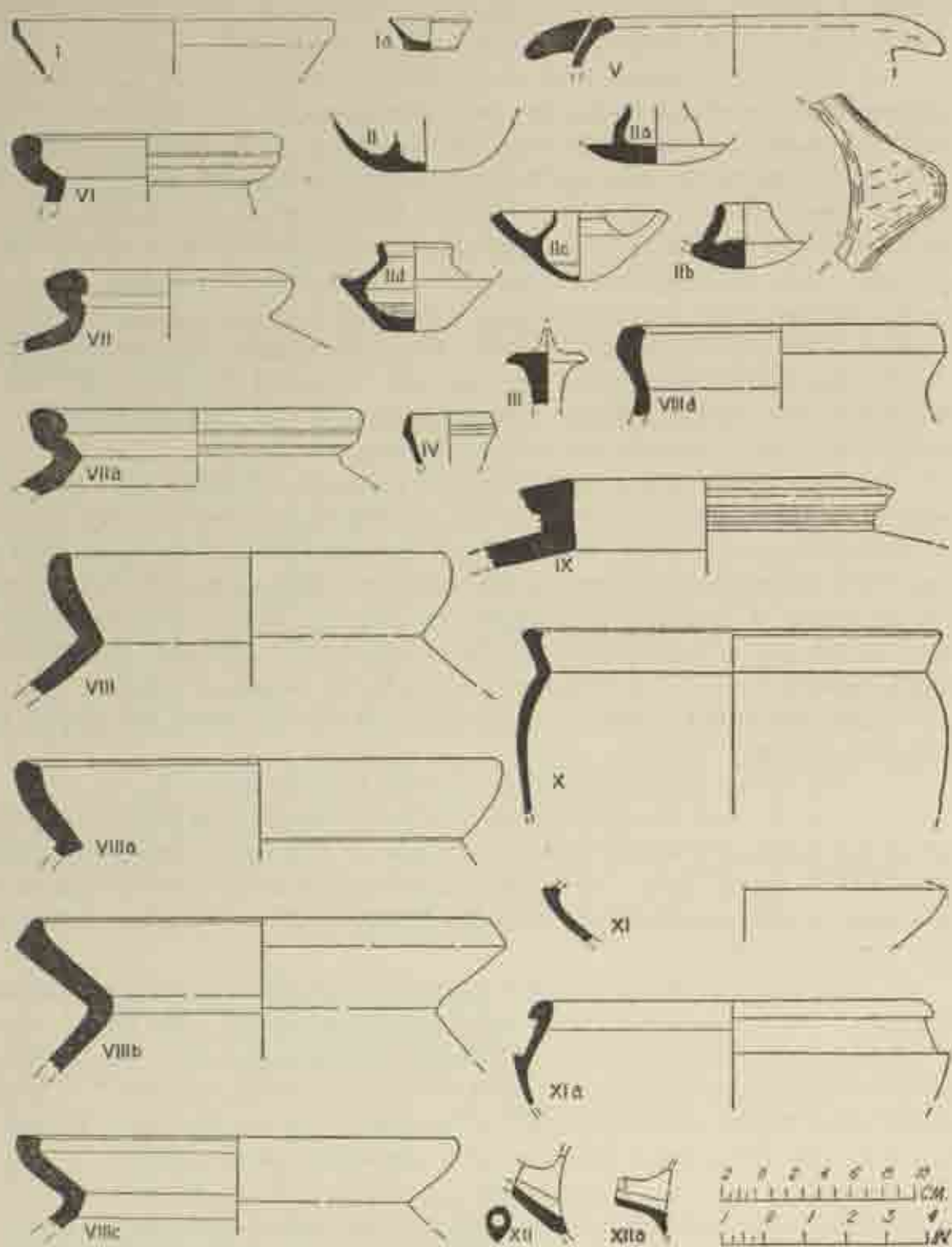


FIG. 23. Tilaura-kot: miscellaneous pottery

devoid of any slip. From the surface. This type of lids is analogous to *Type XIII* from Period IV of Hastināpura.

Type III. Sprinkler-type of water-flask, of grey ware, with a flanged rim, a long narrow vertical neck and presumably a conical knob at the top. The opening through the knob is absent. This type of water-carrier is found in the hands of several Brahmanical and Buddhist images. It is similar to *Type XV* from Period IV of Hastināpura. Of medium fabric, it is treated with a black slip. From the surface.

Type IV. Water-flask (?) of red ware with a vertical externally thickened, grooved and ridged rim and a bottle-neck. Of medium fabric, it is provided with a red slip externally. From layer 2. This type is similar to *Type 43* from Stratum IV (A. D. 100-350) of Ahichchhatrā and somewhat analogous to *Type XVI* from Period IV of Hastināpura.

Type V. Cooking vessel of red ware with a narrowing nail-headed rim, somewhat triangular lug-handles projecting from the rim and a bulging profile. Of coarse fabric, it is devoid of any slip. From layer 2. This type is fairly prolific at Lumbini, Nipania, Pipri, Sisania, Kadzahawa, Bamhni and Lamtiya.

Type VI. Sturdy vase of red ware with an inverted externally-thickened and grooved rim and a shoulder abruptly starting from a ridge below the rim. Of coarse fabric, it is devoid of any slip. From layer 2.

Type VII. Sturdy vase of red ware with an inverted externally-thickened and internally-undercut rim and a shoulder abruptly starting from an inconspicuous ridge below the rim. Of coarse fabric, it is devoid of any slip. From layer 2. *Variant VIIa*, of red ware, has two grooves on the outer side of the rim. Of coarse fabric, it is devoid of any slip. From layer 2.

Type VIII. Large sturdy vase of red ware with a splayed-out featureless rim and a shoulder abruptly starting from a ridge below the rim. Of coarse fabric, it is devoid of any slip. From the surface. *Variant VIIIa*, of red ware, differs from the above by its bevelled rim. Of coarse fabric, it is devoid of any slip. From layer 2. *Variant VIIIb*, of red ware, differs from the main type by its externally-bevelled and internally-thickened rim and the absence of the ridge. Of coarse fabric, it is devoid of any slip. From the surface. *Variant VIIIc*, of red ware, differs from the main type by its internally-thickened and bevelled rim. Of coarse fabric, it is devoid of any slip. From the surface. *Variant VIId*, of red ware, differs from *Variant VIIIa* by an inconspicuous neck. Of coarse fabric, it is devoid of any slip. From layer 2.

Type IX. Sturdy vase of red ware with a vertical externally-thickened flatly-bevelled grooved rim, a short vertical grooved neck and a squarish shoulder. Of coarse fabric, it is devoid of any slip. From the surface.

Type X. Vase of red ware with a splayed-out internally-thickened grooved rim and a convex profile. Of medium fabric, it is devoid of any slip. From layer 2.

Type XI. Cooking-hāṇḍī with a carinated and ridged waist. Of medium fabric, it is devoid of any slip. From layer 2. *Variant XIa*, of red ware, has a very

prominent triangular ridge at the waist, a folded rim and an oblique shoulder. Of medium fabric, it is devoid of any slip. From the surface. This type is analogous to *Type XI* from Kodan.

Type XII. Fragment of a spouted vase of red ware. Of medium fabric, it is treated with a red slip. From the surface. In *Variant XIIa*, a cylinder, made separately, has been inserted into the spout of the vase as in *Type XV* from Kodan. Of medium fabric, it is provided with a red slip. From layer 2.

Type XIII. Vase of red ware with a splayed-out thickened externally-bevelled and grooved rim having a ridge at the base internally. Of medium fabric, it is provided with a red slip and is analogous to *Type XVIIIa* from Kodan. From the surface. In *Variant XIIIa*, of red ware, the ridge is inconspicuous. Of medium fabric, it is treated with a red slip. From layer 2. *Variant XIIIb*, of red ware, differs from the main type by its doubly-

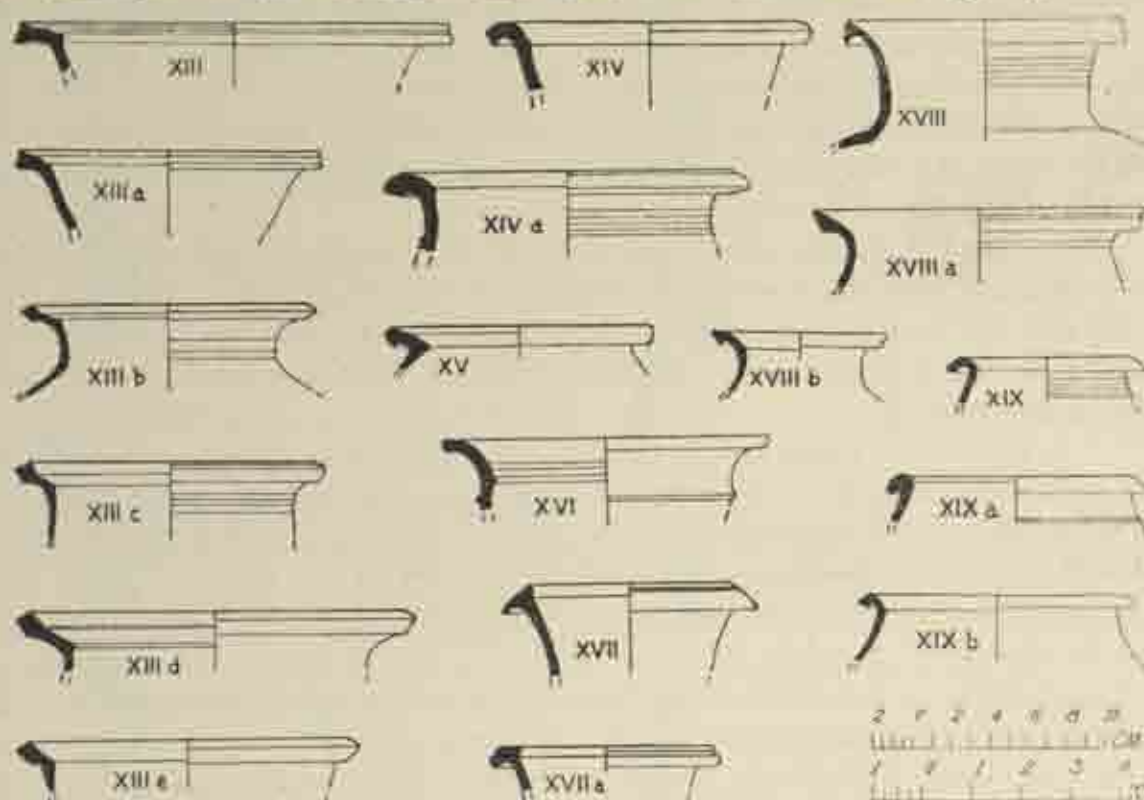


FIG. 24. Tilaura-kot: miscellaneous pottery

bevelled rim. It has a concave neck and a gradually-expanding shoulder. Of medium fabric, it is devoid of any slip at present. From layer 2. *Variant XIIIc*, of red ware, differs from the preceding by a groove on the top of the internally-thickened rim. Of medium fabric, it is provided with a red slip. From layer 2. *Variant XIIId*, of red ware, differs from *Variant XIIIb* by two grooves, one on the top and the other on the inner side of the rim. Of medium fabric, it is provided with a red slip. From layer 2. *Variant XIIIe*, of red ware,

differs from the preceding by the externally-undercut rim and the absence of the groove on the inner side of the rim. Of medium fabric, it is provided with a red slip. From layer 2.

Type XIV. Vase of red ware with a flaring externally-beaked rim and an inconspicuous ridge at the base of the rim internally. Of medium fabric, it is provided with a red slip and is analogous to *Type XIXa* from Kodan. From the surface. *Variant XIVa*, of red ware, differs from the above by its externally bevelled and grooved rim and a grooved neck. Of medium fabric, it is devoid of any slip at present. From the surface.

Type XV. Vase of red ware with a splayed-out externally-thickened rim and a carinated inconspicuous neck. Of medium fabric, it is devoid of any slip at present. From layer 2.

Type XVI. Vase (?) of red ware with a flaring internally-grooved rim and a ridged neck. Of medium fabric, it is provided with a red slip. From the surface.

Type XVII. Vase of red ware with an out-turned ledged rim having a groove on the inner side and a high neck. Of medium fabric, it is devoid of any slip at present and is analogous to *Type XXVc* from Kodan. From layer 1. *Variant XVIIa*, of red ware, differs from the preceding by its flat-topped rim. Of medium fabric, it is provided with a red slip. From layer 1.

Type XVIII. Vase of red ware with an out-turned nail-headed rim having a groove on the inner side, a high concave grooved neck and a convex shoulder. Of medium fabric, it is devoid of any slip at present and is somewhat analogous to *Type XXIV* from Kodan. From layer 2. *Variant XVIIIa*, of red ware, differs from the above by the absence of the groove on the inner side of the rim. Of medium fabric, it is provided with a red slip. From layer 2. *Variant XVIIIb*, of red ware, differs from the preceding by a prominent depression on the inner side of the rim. Of medium fabric, it is devoid of any slip. From layer 2.

Type XIX. Vase of red ware with a flaring clubbed rim, an inconspicuous neck having a weak ridge on the inner side and a bulging profile. Of medium fabric, it is provided with a red slip and is somewhat analogous to *Type XXXb* from Kodan. From layer 2. *Variant XIXa*, of red ware, differs from the above by its drooping rim. Of medium fabric, it is provided with a red slip. From layer 2. *Variant XIXb*, of red ware, differs from the main type by its obliquely-bevelled rim. Of medium fabric, it is treated with a red slip. From layer 2.

5. OTHER FINDS

The picture that emerges from the finds of this very limited excavation is, no doubt, scrappy but sufficient to indicate a comfortable and organized urban life with

economy based evidently on mixed farming.¹ An intimate familiarity with cattle, horses and sheep is reflected in the terracotta animal figurines.² From the exquisite representation of elephants in terracotta, it may be presumed that the animal, wild or domesticated, was well-known.³ Ivory-working was an established craft. The river had fish that were hooked by the people. Used for multifarious purposes, iron had been in wide currency, copper being resorted to for finger-rings, bangles, hair-pins, antimony-rods, fish-hook, etc., and bronze to utensils. A considerable development is noticed in crafts and industries. The general prosperity of the town is suggested not only by the structures of baked bricks and ring-wells, but by ample small finds of various materials. Inscribed sherds and a single sealing reveal literacy at least in a section of the people. Commercial sense and organized trade are attested by the find of a good number of coins. The antiquities hint at the zest in the life of common men. Gold might not have been within the easy reach of many. Even then, with their resources, they were found decorating their houses with terracotta human figurines, their women bedecking themselves with ornaments of semiprecious stones and even cheaper materials and their children playing with diverse toy-figurines. A decorative sense and an aesthetic appeal are amply manifest in these terracottas and other antiquities. Evidently, neither the lover of fine arts nor the artist to satisfy his craving was wanted. Indeed, the people here of the third-first centuries B. C. did not lag behind their contemporaries in northern India, so far as the cultural achievements in various aspects of life are concerned.

A. COINS

Altogether seventy coins were obtained from the excavation including a Gorakhpuri *sikkā*, found 5 cm. below the surface. Out of these, thirteen (one from Phase B of Period I, seven from Pit 1 and the rest from the rampart-filling) are in an extremely poor state of preservation and do not preserve the symbols, seven of them being small fragments. Silver is the material for two coins, both punch-marked, the rest being of copper. The surface-finds number fifteen, of which three are fragments; with a single exception, which is of silver, all are of copper. Extensive circulation of coins indicates a systematized trade.

¹ Husks were found in the bricks of Structures 1 and 2 (p. 13). Buddhist texts refer to the ploughing festival watched by Buddha as a boy. The ground of the Kapilavastu country, according to Hsien Tsang, 'is rich and fertile, and is cultivated according to the regular season.'

² Bones found in the excavation include those of domestic pigs, humped cattle, buffaloes, goats, sheep and dogs. Chopping-marks on two bones of the pigs and on one of the sambur deer possibly indicate that the people used these animals for food.

³ Elephants and horses are a common sight even now, as they serve as transport for the men of means. Fa-hien notes the danger from wild elephants and lions.

(i) *Copper coins with a four-spoked wheel*

The characteristic symbol of the site seems to have been a four-spoked wheel,¹ found clearly on as many as thirty-seven specimens. The same symbol again occurs on six specimens collected from the surface, and it is highly probable that five of the defaced coins bear this very symbol. From Phase A of Period I came only one coin, which also contains the wheel. Consequently, it may be presumed that these coins were the local issues of the ancient Tilaura-kot region when it was an independent state. The wheel, no doubt, is not an unusual symbol on coins, but usually it has more than four spokes as seen on the punch-marked coins, the city-issues of Vidiśā, several Nāga coins of Padmāvati, coins with the legend *Achyu* of Ahichchhatrā and coins of Kulūta and the Vṛishnis. The four-spoked wheel, though rare, is also not unknown, as it occurs on a few punch-marked coins² as a reverse mark and on the Lanky Bull type of coins of Kauśāmbī. But on the present coins it is absolutely unassociated with any other symbol or legend.

The coins of this distinct type with a blank reverse fall into three groups—(i) die-struck small oblong or squarish pieces, (ii) die-struck small circular coins, and (iii) cast circular ones, all in copper.

Of special interest are the first and second groups, represented respectively by seventeen (excluding one from the surface) and ten specimens (excluding two from the surface). All of them bear on the obverse a single symbol, a four-spoked wheel composed of a plain cross without any central pellet but enclosed by a rim, the latter generally circular and exceptionally slightly ellipsoid. The stamped wheel, like the symbols on punch-marked coins, stands out in relief from an incuse (clear in better preserved specimens, pl. XXVI, 1) and does not project above the surface. The reverse is blank, a few having pitted surface evidently due to corrosion. Almost all of them are not only worn showing thereby a prolonged period of circulation, but also heavily corroded, with the result that they have considerably thinned down after chemical treatment. In the circumstances they are of little help in determining their original weights and the standards on which they were struck. As all these coins are impressed on one side with a single symbol, they may be regarded as single-mark die-struck coins, though the possibility of their being classed as punch-marked coins should not be overlooked.

OBLONG OR SQUARE STRUCK COINS.—The oblong and squarish coins were chiselled out of copper sheets, as proved by the slanting cut of the edges in some thick coins. One of the two thickest coins has a slanting clean section for more than half the

¹ This symbol has been found on a few sherds (pl. XXVII, 6 and 7) and a sealing (pl. XXVII, 1) as well.

² E. H. C. Walsh, *Punch-marked Coins from Taxila*, Mem. Arch. Surv. Ind., no. 39 (Delhi, 1939), pl. XXIII, 689. The antiquity of the four-spoked wheel goes back to the Harappan times as attested by a seal from Mohenjo-daro (cf. E. J. H. Mackay, *Further Excavations at Mohenjo-daro*, II, New Delhi, 1937, pl. XCVII, 554) bearing an identical representation of this very symbol.

thickness, the remainder of the edge being rough; apparently the chisel did not penetrate through the sheet, and the flan was taken out by breaking. The wheels were mainly of three sizes, the largest .9 cm. in diameter (from Pit 1), the next and the commonest about .6 cm. represented by twelve specimens (one each from Phase A and Phase B of Period I, eight from Pit 1 and two from the rampart-filling) and the smallest .5 cm. represented by three specimens (two from Pit 1 and one from the rampart-filling); the remaining one (from Pit 1) is too defaced to admit of the diameter taken. With one exception the dies are substantially smaller than the flans. The stamping was carried out rather capriciously, as a result of which the impression is often away from the centre, and in a few cases a portion of the wheel, due to its having been impressed near the edge, has been left out of the flan (pl. XXVI, 2). The maximum thickness, represented by one (size: .75 cm. \times .6 cm.) of the smallest coins is .2 cm., its weight being .75 gm. Of nearly the same thickness, is one of the largest squarish pieces measuring .9 \times .8 cm. and weighing 1.13 gm. This specimen is more worn-out than the preceding one, suggesting thereby the existence of at least two different denominations.

CIRCULAR STRUCK COINS.—From the defaced condition of the circular coins, it is rather hazardous to decide the method of their manufacture. One of these coins has, around its edge, cracks which might have been due to its being beaten out of a globule or due to the stamping of the symbol itself and a second, the best preserved (pl. XXVI, 3) of the series, was probably cut out of a sheet. The diameter of the wheel in two cases (one from Phase B of Period I and the second from the rampart-filling) is .9 cm., in another two (one from Pit 1 and the other from the rampart-filling) .8 cm., in further two cases (one from Phase B of Period I and the other from the rampart-filling) .6 cm. and in one specimen (from the rampart-filling) .7 cm., the diameter in the remaining three (two from Pit 1 and one from the rampart-filling) is uncertain due to their worn condition. In three specimens the die is much smaller than the extant flan and in two of these the impression is away from the centre (pl. XXVI, 3). The usual diameter of the flan is .9 cm., and only in one specimen it must have been slightly above 1 cm.¹ The maximum thickness, available in a single specimen (pl. XXVI, 3) which is also the heaviest (weighing .9 gm.), is .2 cm. One of these coins came from the lower level of Phase B of Period I. Though no specimen of this group came from the deposit of Phase A, the specimen from which is oblong, it is likely that both the oblong and round coins were in circulation together, as in the case of the punch-marked coins.

CIRCULAR CAST COINS.—In contradistinction to the die-struck coins, the cast circular coins with this symbol are well-preserved in most cases, and the neatly-executed wheel, in high relief, stands out prominently above the flan. In some cases, the

¹ This coin is now reduced to a flake bearing the impression of the wheel with the rim missing, and the author is not very sure of its attribution to the die-struck group or the cast one.

protuberances, left out in casting, are extant. The better-preserved specimens of this group are both larger and heavier than the struck pieces. The diameter of the best preserved (pl. XXVI, 4) coins is 1.2 cm. (without protuberances) which appears to have been the size of all the coins of this series. They also look like having been struck on the same standard, though several had undergone heavy loss of weight. The weight of two coins which hardly show signs of wear are 2.01 gm. (with protuberances) and 1.8 gm. (without protuberances). The junction of the four spokes, unlike that on the die-struck coins, is thickened resulting in a tiny pellet. In one of the compartments of the wheel, in two specimens, is a pellet-like excrescence caused perhaps by the faulty mould. The diameter of the wheel is 1 cm. as attested by eight specimens where the symbol is distinct. Three of these coins are from Pit 1 and the remaining seven from the rampart-filling. Their absence from Phase A and the lower level of Phase B of Period I may mean that the developed technique is a later introduction, though the possibility of the continuance of the die-struck coins even after the adoption of the cast coins cannot be entirely ruled out.

(ii) *Punch-marked coins*

In all there are five punch-marked coins including a surface-find. Three of them (one each from Pit 1, the rampart-filling and the surface) are of silver and the remaining two (one from Phase B of Period I and the other from Pit 1), both circular, are of copper.

The silver specimen (pl. XXVI, 9) from Pit 1 did not undergo much wear, and as such it is difficult to believe from its weight, which is 2.5 gm., that it was ever struck to the weight of thirty-two *ratīs*. The flan, almost regular oblong, was cut out of a fairly thick sheet. On the obverse are five symbols: (i) part of the sun (the rest left out of the flan), (ii) half of the six-armed symbol (the remaining half left out of the flan) consisting of three arrow-heads alternating with three taurine symbols round the central rim, the latter with a pellet in the centre, (iii) half of a three-arched symbol (?), (iv) the so-called caduceus with three conjoined ellipsoids having a straight line passing through the centre of all the three, and (v) a curious symbol, somewhat resembling a triangle-headed standard, combined with a triskelis having a circular centre, the last, partly distinct, stamped over the sun with the consequent obliteration of the latter. The reverse symbol is the so-called caduceus, smaller than that of the obverse. The coin thus falls under Allan's Variety *a* of Group III of Class 2.¹

The second silver (debased ?) coin (pl. XXVI, 11), which is from the rampart-filling, is oblong, made six-sided by clipping two of its corners evidently for the desired weight. It is larger but thinner than the preceding. Worn to an appreciable extent, it was evidently in prolonged circulation which is also suggested by as many as three reverse marks. Its weight is 2.6 gm. Considering its worn condition, it might have been

¹ J. Allan, *Catalogue of the Coins of Ancient India* (London, 1936), p. 28.

struck to the ancient standard of thirty-two *ratīs*. Its obverse also bears five symbols: (i) the sun, almost complete, (ii) the major part of the six-armed symbol comprising a circle, with a central pellet, enclosed by three broad arrow-heads and three ovals, each enclosing a taurine (?) symbol within, alternately, (iii) humped bull (which has cut off the top portion of one of the ovals of the six-armed symbol) to right, (iv) elephant (its hinder part has been over stamped by the sun) to right, and (v) a swift-footed running animal with erect ears, possibly hare (back portion either left unimpressed or blurred off completely) to right on a multi-arched symbol (mostly out of the flan). The reverse symbols are three small faint marks, all punched shallowly; one is a semicircular incision, the second double arc or crescent one above the other and the third almond-shaped. The obverse of this coin is similar to Allan's Variety *c* of Group III of Class 6.¹ The same combination of obverse symbols is found on the older punch-marked coins of Taxila, found in a hoard buried after 317 B. C.²

The third silver coin (from the surface), clipped of a thick sheet, is the thickest of the three but smallest in size. Worn to some extent, it is oblong with one corner slightly clipped. Its small flan accounts for the confused jumble of symbols on the obverse (pl. XXVI, 10): half of the sun has been left out of the flan; the upper portion of an animal, bull or elephant, has similarly been left out; running hare with erect ears and curled raised tail is alone fully impressed; and the six-armed symbol has been over stamped by the fifth symbol so much that neither is legible, except a portion of the pellet and the circle of the six-armed symbol. On the reverse appears to be a tiny branch, punched shallowly and defaced considerably.

The copper coin, from Pit 1, is worn out to a great extent. There are two symbols alone on one side. One is the usual sun, half of which has been impressed. The other is a curious-looking symbol, somewhat reminiscent of an *ankuṣa*: a taurine (?) symbol is seen here hanging from the end of a short bar, the latter emanating at right angles from a long bar (pl. XXVI, 8). The other side does not bear any incisions, though there are dot-like excrescences.

The second copper coin, which is thoroughly worn and defaced, has been ascribed to this group, though with some hesitation, as a part of the solar symbol can be made out near the edge. Possibly there is another symbol on this very face.

(iii) *Miscellaneous uninscribed cast copper coins*

The number of the uninscribed cast copper coins is twelve (excluding three from the surface), on all of which symbols are legible either fully or partly. Four of the coins with symbols completely defaced might also have belonged to this group. With the

¹ *Op. cit.*, pp. 66 ff.

² E. H. C. Walsh, *Punch-marked Coins from Taxila*, Mem. Arch. Surv. Ind., no 59 (Delhi, 1939), p. 19.

exception of two (possibly three) coins which are circular, all are either square or oblong. As many as eight varieties can be distinguished, of which four are quite common and known from several sites.

Variety 1 is represented by a single specimen (from Pit 1) which is identical with Variety *i* of the uninscribed cast coins of Allan.¹ Of square shape, it has on the obverse a triangle-headed standard on top left, below which is a *svastika*, and a hollow cross on top right, beneath which is a trotting elephant facing left. On the reverse are a three-leaved tree within a railing on left and a crescent-crowned three-arched (in two tiers) symbol on right top, below which is a triangle-headed standard with a small taurine symbol on left (pl. XXVI, 12).

Belonging to Variety 2 and Allan's Variety *j*² are three coins. The best preserved (from Pit 1) of them is squarish and bears on the obverse on left a triangle-headed standard with two prongs on right, a *svastika* and a taurine symbol on top right, below which is a trotting elephant facing left, and a ladder-like symbol at the bottom. On the reverse are crescent-crowned three-arched symbol on top left, below which is a hollow cross, a taurine symbol on top middle and a tree within railing on right (pl. XXVI, 13). The second coin (from Phase B of Period I), despite its very worn condition, is heavier than the first and certainly not out of the same mould, as its tree occupies a larger part of the flan. The third coin (from the rampart-filling) is considerably defaced and is of a smaller size and denomination.

Of Variety 3 and Variety *k* of Allan³ are two coins, one from Pit 1 and the other from the surface. Their reverse is identical with that of Variety 2. On the obverse are a taurine symbol on top left, a trotting elephant on top right, a *svastika* on bottom left and a triangle-headed standard placed horizontally on bottom right (pl. XXVI, 14). On the surface-find, the tusks of the elephant are clear. All these three varieties closely resemble one another in general style and execution.

Variety 4 is represented by five specimens (three from the rampart-filling and two from the surface), all of which are highly defaced and do not permit of the identification of all the symbols. Of at least two different sizes, they have been grouped together on account of a distinctive tree (within railing), elongated and with five leaves (pl. XXVI, 15 and 16), in some cases very thin, and execution of the symbols different from that of the previous groups. The obverse symbol is an animal, facing left on right, distinct in two cases where it is a lanky bull with prominent horns, before a standard (?); above the back of the animal is possibly a symbol, completely blurred, while below is a ladder-like symbol. On the reverse are a tree within railing on right, clear in all cases, Ujjain symbol on bottom left, clear in two cases, and a *nandipada* (possibly an elaborate one) clear in one case; other symbols, if any, could not be recognized.

¹ *Op. cit.*, p. 87 and pl. XI, 7. Though Allan has not included *svastika*, it is clear on his plate.

² *Ibid.*, pp. 88 and 89 and pl. XI, 8, 9 and 10.

³ *Ibid.*, pp. 89-91 and pl. XI, 11, 13, 14 and 15.

Variety 5 is represented by a single square coin (from the rampart-filling). On the obverse are a trotting elephant (one tusk visible) facing right on left before Ujjain symbol (?) on right and a ladder-like symbol at the extreme bottom. At each of the two top corners is a symbol, of which the one at the right corner is defaced completely leaving a raised square; the corresponding symbol on left is a *svastika* (?). The symbol on the reverse is a tree within a railing enclosed by a circle (pl. XXVI, 17).

Variety 6 is also of a single specimen (from Phase B of Period I). Of circular shape, it bears on the obverse a neatly-executed trotting elephant with two tusks visible, facing left, and on the reverse a crescent-crowned symbol with three arches in two tiers (pl. XXVI, 18). It conforms to Allan's Variety *q'* which had an extensive currency.

The circular specimen (from top of Phase B of Period I) belonging to Variety 7 is not only defaced but damaged with the major portion of the central part missing (pl. XXVI, 19). Still it is reminiscent of the Lanky Bull type of the coins of Kauśāmbī. On the obverse (?) is a roughly triangle-headed standard (on left), above which is a *nandipada*, the top part, resembling the Brāhmī letter *ya*, alone distinct. By the side of the bottom part of the standard is perhaps an arched symbol, above which looks like the curved leg of a bull, while by the side of the *nandipada* is perhaps a portion of the head with horns. But this point cannot be stressed in the complete absence of the body of the animal, which, if it ever existed, occupied the central part, now missing. The only other extant symbol is Ujjain symbol near the right edge. On the reverse (?) a long vertical bar capped by a slightly curved bar can alone be made out on right; it is too defaced to be identified with a tree within railing.

Under Variety 8 comes a tiny coin (from the rampart-filling), measuring .5 × .45 cm. and weighing .04 gm. A small part of the flan is missing. On the obverse is a small wheel with eight spokes radiating from a central pellet (pl. XXVI, 5), the diameter of the wheel being .6 cm. On the reverse is a pellet-like excrescence.

(iv) *Miscellaneous copper coins*

Unaffiliated to the coins noted above are two coins, grouped under miscellaneous copper coins. Worn to an appreciable extent, both seem to have been circular and struck. One (from Phase B of Period I) of them bears on the obverse an unusual symbol composed of an elongated S crossed by a slanting bar with two ends thickened in the form of a pellet and two detached pellets placed cross-wise (pl. XXVI, 6). If the detached pellets are joined with the slanting bar, the motif will be a cursive *svastika*. On the obverse of the other (from the rampart-filling) is a creeper with three broad leaves and a detached pellet (pl. XXVI, 7); whether this pellet originally joined the creeper in the form of a leaf or fruit cannot be determined now. The reverse of both the coins is blank.

¹ *Op. cit.*, pp. 94 ff. and pl. XI, 25.

(v) *Inscribed copper coins*

Only two inscribed copper coins were found. The oblong cast one (from the rampart-filling) bears on the obverse a trotting elephant, facing right, before a standard with a crowning member. Above the elephant are traces of four letters. On the reverse is a somewhat elaborate tree within railing inside an oblong enclosure (pl. XXVI, 20). By the sides of the railing are symbols (?). The legend on this crucial coin, which would have helped greatly in determining the upper limit of the rampart, is unfortunately illegible. It is closely similar to the coin from Ayodhyā illustrated on pl. XLIII, 8 of Allan's *Catalogue*. Here also the legend is blurred and Allan read *devasa*¹ and grouped this with the coins of the earlier dynasty assigned to the second-first centuries B. C. by him.

The other coin (from the surface) is circular. On the obverse is a square incuse containing the issuer's name in genitive (*Agimitrasa*) beneath the three symbols characteristic of the so-called Pañchāla coin type. The legend is in characters of the first century B. C. The reverse is defaced (pl. XXVI, 21).

Below is a catalogue of the legible coins.

(i) *Copper coins with a four-spoked wheel*

OBLONG OR SQUARE STRUCK COINS

1. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .9 × .8 cm.; *weight:* 1.13 gm.; *shape:* squarish; *condition:* fair.

From Pit 1. (TLK-1187.)

2. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .9 × .85 cm.; *weight:* .89 gm.; *shape:* squarish; *condition:* fairly

good. From Pit 1. (TLK-1103.)

3. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .8 × .8 cm.; *weight:* .78 gm.; *shape:* square; *condition:* fairly good.

From Phase B of Period I. (TLK-291.) Pl. XXVI, 1.

4. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .75 × .6 cm.; *weight:* .75 gm.; *shape:* oblong; *condition:* fairly

good. From Pit 1. (TLK-579.)

¹ *Op. cit.*, p. 135.

EXCAVATION AT TILaura-KOT

5. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .95 × .7 cm.; *weight:* .65 gm.; *shape:* oblong; *condition:* fairly good. From Pit 1. (TLK-1143.)
6. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .8 × .8 cm.; *weight:* .59 gm.; *shape:* square; *condition:* fair. From Pit 1. (TLK-1158.)
7. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .85 × .7 cm.; *weight:* .53 gm.; *shape:* oblong; *condition:* fairly good. From Pit 1. (TLK-1157.)
8. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .8 × .7 cm.; *weight:* .52 gm.; *shape:* irregular oblong; *condition:* fairly good. From Phase A of Period I. (TLK-1203.)
9. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .7 × .65 cm.; *weight:* .502 gm.; *shape:* squarish; *condition:* poor. From Pit 1. (TLK-1028.)
10. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .8 × .65 cm.; *weight:* .5 gm.; *shape:* oblong; *condition:* bad. From Pit 1. (TLK-1156.)
11. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .8 × .7 cm.; *weight:* .48 gm.; *shape:* irregular oblong; *condition:* poor. From Pit 1. (TLK-1170.)
12. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .95 × .8 cm.; *weight:* .45 gm.; *shape:* roughly oblong; *condition:* fairly good. From the rampart-filling. (TLK-1202.)
13. *Obv.* Four-spoked wheel.
Rev. Blank (?).
Size: .7 × .7 cm.; *weight:* .415 gm.; *shape:* square; *condition:* poor. From the rampart-filling. (TLK-440.)
14. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .9 × .8 cm.; *weight:* .38 gm.; *shape:* roughly oblong; *condition:* fairly good. From the rampart-filling. (TLK-576.) Pl. XXVI, 2.

15. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .7 × .6 cm.; *weight:* .23 gm.; *shape:* roughly oblong; *condition:* fair. From Pit 1. (TLK-1099.)
16. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .75 × .6 cm.; *weight:* .2 gm.; *shape:* roughly oblong; *condition:* poor. From Pit 1. (TLK-937.)
17. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .9 × .55 cm.; *shape:* ovalish; *condition:* poor. From Pit 1. (TLK-1031.)

CIRCULAR STRUCK COINS

18. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .9 cm. (max. diam.); *weight:* .9 gm.; *shape:* circular; *condition:* fairly good. From Phase B of Period I. (TLK-292.) Pl. XXVI, 3.
19. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .9 cm. (max. dia.); *weight:* .65 gm.; *shape:* circular; *condition:* bad. From Pit 1. (TLK-909.)
20. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: .9 cm. (max. dia.); *weight:* .6 gm.; *shape:* circular; *condition:* fairly good. From Pit 1. (TLK-1100.)
21. *Obv.* Four-spoked wheel (?), badly defaced.
Rev. Blank.
Size: .9 cm. (max. dia.); *weight:* .5 gm.; *shape:* circular; *condition:* poor. From Pit 1. (TLK-1169.)
22. *Obv.* Four-spoked wheel, badly defaced.
Rev. Blank.
Size: .95 cm. (max. dia.); *weight:* .33 gm.; *shape:* circular; *condition:* poor. From Phase B of Period I. (TLK-540.)
23. *Obv.* Four-spoked wheel, badly defaced.
Rev. Blank.
Size: .9 cm. (max.); *weight:* .3 gm.; *shape:* circular; *condition:* poor. From the rampart-filling. (TLK-228.)
24. *Obv.* Four-spoked wheel, badly defaced.
Rev. Blank.

Size: .9 cm. (max. dia.); *weight:* .26 gm.; *shape:* circular; *condition:* poor. From the rampart-filling. (TLK-439.)

25. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .75 cm. (max. dia. extant at present); *weight:* .208 gm.; *shape:* circular; *condition:* fair. From the rampart-filling. (TLK-27.)

26. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .8 cm. (max. dia. extant at present); *weight:* .09 gm.; *shape:* roughly circular; *condition:* poor. From the rampart-filling. (TLK-775.)

27. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: .6 cm. (max. dia.); *shape:* circular; *condition:* poor. From the rampart-filling. (TLK-434.)

CIRCULAR CAST COINS

28. *Obv.* Four-spoked wheel with a thickened junction and protuberances left in casting.

Rev. Blank.

Size: 1.2 cm. (without protuberances and 1.6 cm. with protuberances); *weight:* 2.01 gm.; *shape:* circular; *condition:* good. From Pit 1. (TLK-1052.)

29. *Obv.* Four-spoked wheel with the junction in the form of a pellet.

Rev. Blank.

Size: 1.2 cm.; *weight:* 1.8 gm.; *shape:* circular; *condition:* good. From Pit 1. (TLK-1102.) Pl. XXVI, 4.

30. *Obv.* Four-spoked wheel with the junction in the form of a pellet.

Rev. Blank.

Size: 1.2 cm. (without protuberances and 1.35 cm. with protuberances); *weight:* 1.65 gm.; *shape:* circular; *condition:* fairly good but slightly defaced. From the rampart-filling. (TKL-26.)

31. *Obv.* Four-spoked wheel.

Rev. Blank.

Size: 1.1 cm. (without protuberances and 1.3 cm. with protuberances); *weight:* 1.62 gm. (before cleaning); *shape:* circular; *condition:* poor. From the rampart-filling. (TLK-82.)

32. *Obv.* Four-spoked wheel with the junction thickened.

Rev. Blank.

Size: 1.1 cm. (maximum available diameter); *weight:* 1.17 gm.; *shape:* circular; *condition:* fair but worn. From the rampart-filling. (TLK-725.)

33. *Obv.* Four-spoked wheel with the junction in the form of a pellet.
Rev. Blank.
Size: 1.2 cm.; *weight:* 1.17 gm.; *shape:* circular; *condition:* fairly good.
 From Pit 1. (TLK-1145.)
34. *Obv.* Four-spoked wheel with the junction thickened.
Rev. Blank.
Size: 1.1 cm. (maximum available diameter); *weight:* .88 gm.; *shape:* circular; *condition:* fairly good. From the rampart-filling. (TLK-1201.)
35. *Obv.* Four-spoked wheel with the junction in the form of a pellet.
Rev. Blank.
Size: 1.1 cm. (maximum available diameter); *weight:* .702 gm.; *shape:* circular; *condition:* fair but worn, some part missing. From the rampart-filling. (TLK-508.)
36. *Obv.* Four-spoked wheel with the junction thickened.
Rev. Blank.
Size: 1.2 cm.; *weight:* .68 gm.; *shape:* circular; *condition:* fair but worn.
 From the rampart-filling. (TLK-489.)
37. *Obv.* Four-spoked wheel.
Rev. Blank.
Size: 1.1 × .8 (minimum) cm.; *weight:* .585 gm.; *shape:* oval; *condition:* bad, defaced and portion missing. From the rampart-filling. (TLK-102.)

(ii) *Punch-marked coins*

1. *Obv.* Sun, six-armed symbol, the so-called caduceus, three-arched symbol and standard with a conjoined triskelis.
Rev. The so-called caduceus.
Metal: silver; *size:* 1.5 × 1.2 cm.; *weight:* 2.5 gm.; *shape:* oblong; *condition:* good. From Pit 1. (TLK-1104.) Pl. XXVI, 9.
2. *Obv.* Sun, six-armed symbol, bull, hare and elephant.
Rev. Semicircle, double arc and ovoid.
Metal: debased (?) silver; *size:* 1.9 × 1.3 cm.; *weight:* 2.6 gm.; *shape:* hexagonal; *condition:* fair. From the rampart-filling. (TLK-393.) Pl. XXVI, 11.
3. *Obv.* Sun, six-armed symbol, animal (bull or elephant), hare and an indistinct symbol.
Rev. Twig.
Metal: silver; *size:* 1.2 × .8 cm.; *weight:* 2.58 gm.; *shape:* oblong; *condition:* good. From the surface. Pl. XXVI, 10.
4. *Obv.* Sun and taurine (?) hanging from a short horizontal bar, the latter bifurcating from a long vertical bar.
Rev. Blank.

Metal: copper; *size:* 1.3 cm. (max. dia.); *weight:* 1.115 gm.; *shape:* circular; *condition:* fair. From Pit 1. (TLK-580.) Pl. XXVI, 8.

5. *Obv.* Sun and another indistinct symbol.

Rev. Blank.

Metal: copper; *size:* .95 cm. (max. dia.); *weight:* .26 gm.; *shape:* circular; *condition:* bad. From Phase B of Period I. (TLK-130.)

(iii) *Miscellaneous uninscribed cast copper coins*

VARIETY 1

1. *Obv.* Triangle-headed standard on l., hollow cross on r., *svastika* and elephant to l.

Rev. Tree within railing on l., crescent-crowned three-arched symbol on r., taurine symbol and triangle-headed standard.

Size: 1.5 × 1.4 cm.; *weight:* 3.5 gm.; *shape:* squarish; *condition:* good. From Pit 1. (TLK-949.) Pl. XXVI, 12.

VARIETY 2

2. *Obv.* Triangle-headed standard on l., *svastika*, taurine symbol on r., elephant to l. and ladder-like symbol.

Rev. Crescent-crowned three-arched symbol on l., taurine symbol, hollow cross on l., and tree within railing on r.

Size: 1.5 × 1.45 cm.; *weight:* 2.2 gm.; *shape:* squarish; *condition:* good. From Pit 1. (TLK-1101.) Pl. XXVI, 13.

3. *Obv.* Trotting elephant to l. and four other indistinct symbols, most probably similar to those on the obverse of Reg. no. TLK-1101.

Rev. Tree within railing and indistinct symbols, one of which at the left top corner looks like crescent-topped three-arched symbol.

Size: 1.4 × 1.3 cm.; *weight:* 2.415 gm.; *shape:* squarish; *condition:* fair but defaced. From Phase B of Period I. (TLK-41.)

4. *Obv.* Triangle-headed standard on l., elephant to l. on r., above which are symbols, blurred but most probably similar to those on Reg. no. TLK-1101 and ladder-like symbol (?) at the extreme bottom.

Rev. Three-arched symbol (?) on l., below which is hollow cross, and tree within railing.

Size: 1.1 cm. square; *weight:* 1.06 gm.; *shape:* square; *condition:* fair but defaced. From the rampart-filling. (TLK-656.)

VARIETY 3

5. *Obv.* Taurine symbol on l., elephant to l. on r., *svastika* on l., and triangle-headed standard on r.

Rev. Crescent-crowned three-arched symbol on l., taurine symbol, hollow cross on l. and tree within railing on r.

Size: 1.4 × 1.3 cm.; *weight:* 2.5 gm.; *shape:* squarish; *condition:* fair but defaced. From Pit 1. (TLK-575.) Pl. XXVI, 14.

6. *Obv.* As preceding.

Rev. As preceding.

Size: 1.5 square; *weight:* 3.535 gm.; *shape:* square; *condition:* good. From the surface.

VARIETY 4

7. *Obv.* Animal to l. on r. and other indistinct symbols.

Rev. Elongated tree within railing on r. and Ujjain symbol (?) on l. The symbol above Ujjain symbol (?) is obliterated.

Size: 1.3 × 1.2 cm.; *weight:* 1.2 gm.; *shape:* oblong; *condition:* bad and worn to a great extent. From the rampart-filling. (TLK-83.) Pl. XXVI, 15.

8. *Obv.* Lanky bull to l. on r. Other symbols indistinct.

Rev. Elongated tree within railing on r. Other symbols indistinct.

Size: 1.7 × 1.15 cm.; *weight:* 1.017 gm.; *shape:* irregular oblong; *condition:* bad. From the rampart-filling. (TLK-577.)

9. *Obv.* Defaced.

Rev. Elongated tree within railing on r., Ujjain symbol on bottom l. and a third indistinct symbol.

Size: 1.2 × 1.1 cm.; *weight:* .7 gm.; *shape:* irregular; *condition:* bad. From the rampart-filling. (TLK-724.)

10. *Obv.* Lanky bull to l. on r. before a standard (?), and indistinct symbol above the back of the bull and a ladder-like symbol (?) below.

Rev. Elongated tree within railing on r., Ujjain symbol on bottom l. and *nandipada* on top l.

Size: 1.5 × 1.35 cm.; *weight:* 1.72 gm.; *shape:* oblong; *condition:* fair. From the surface. Pl. XXVI, 16.

11. *Obv.* Animal (bull ?) to l., on r., before a standard (?). Below ladder-like symbol (?).

Rev. Elongated tree within railing on r. Other symbols indistinct.

Size: 1.25 × 1.2 cm.; *weight:* 1.21 gm.; *shape:* squarish; *condition:* bad and worn to a great extent. From the surface.

VARIETY 5

12. *Obv.* Trotting elephant to r., on l., before Ujjain symbol (?) and ladder-like symbol below. At top left corner is *svastika* (?), the corresponding symbol on the right is blurred leaving a raised square.

Rev. Tree within railing enclosed by a circle.

Size: 1.5 sq.; *weight:* 1.47 gm.; *shape:* square; *condition:* fair, but greatly worn. From the rampart-filling. (TLK-488.) Pl. XXVI, 17.

VARIETY 6

13. *Obv.* Trotting elephant to l.

Rev. Crescent-crowned three-arched symbol.

Size: 1.4 cm. (dia.); *weight:* 2.085 gm.; *shape:* circular; *condition:* good. From Phase B of Period I. (TLK-129.) Pl. XXVI, 18.

VARIETY 7

14. *Obv.* Triangle-headed standard above which is *nandipada*. Of other symbols only Ujjain symbol and a portion of arched symbol (?) can be recognized.

Rev. Only a long vertical bar capped by a short curved bar can be recognized.

Size: 1.6 cm. (dia.) and 1.7 cm. with protuberances; *weight:* .5 gm.; *shape:* circular; *condition:* bad. From the top of Phase B of Period I. (TLK-773.) Pl. XXVI, 19.

VARIETY 8

15. *Obv.* Eight-spoked wheel

Rev. Blank.

Size: .5 × .45 cm.; *weight:* .04 gm.; *shape:* squarish (originally circular?); *condition:* fair but considerably worn and part missing. From the rampart-filling. (TLK-578.) Pl. XXVI, 5.

(iv) *Miscellaneous copper coins*

1. *Obv.* Symbol composed of an elongated S crossed by a slanting bar with ends in the form of a pellet and two crosswise pellets.

Rev. Blank.

Size: 1.25 × 1.2 cm.; *weight:* .9 gm.; *shape:* circular (?); *condition:* fair. From Phase B of Period I. (TLK-131.) Pl. XXVI, 6.

2. *Obv.* A creeper with three broad leaves and a detached pellet.

Rev. Blank.

Size: 1.1 × 1.05 cm.; *weight:* .68 gm.; *shape:* circular; *condition:* fair.

From the rampart-filling. (TLK-735.) Pl. XXVI, 7.

(v) *Incribed copper coins*

1. *Obv.* Elephant to r. before standard. Faint traces of four letters above elephant.

Rev. Tree within railing inside an oblong border. Symbols (?) by the sides of the railing.

Size: 1.4 × 1.2 cm.; *weight:* 1.2 gm.; *shape:* oblong; *condition:* poor.

From the rampart-filling. (TLK-774.) Pl. XXVI, 20.

2. *Obv.* Three well-known symbols of the so-called Pañchāla coin-type with the legend *Agimitrasa* below.

Rev. Defaced.

Size: 1.5 cm. (dia.); *weight:* 4.08 gm.; *shape:* circular; *condition:* fair.

From the surface. Pl. XXVI, 21.

B. SEALINGS AND INSCRIBED POTSDHERDS

The excavation yielded three sealings, all in terracotta, and two inscribed potsdherds.

Pl. XXVII

1. Sealing, plano-convex in shape. Impressed with a small four-spoked wheel within an ellipsoid incuse. The diameter of the wheel is .6 cm. From Pit 1. (TLK-871.)

2. Roughly-fashioned ball, partly incused with double impression, one of which is definitely a small six-spoked wheel, .6 cm. in diameter, and the other might have been also a wheel. Treated with a dark-red slip, of which faint traces linger around the impression. From Pit 1. (TLK-1160.)

3. Sealing, plano-convex in shape. There seems to have been four letters, of which the second is *va* and the indistinct first, third and fourth look like *u*, *ga* and *yi* respectively. On palaeographical evidence, the letters may be assigned to the second century B. C. From top of Phase B of Period I. (TLK-33.)

4. Fragment of a vase of red ware. On the shoulder is a shallow circular incuse, partly preserved, containing the last two letters in low relief. These letters are

ni and *ye* in characters of the third century B. C. There were at least two, if not three, other letters before them. From the early level of Phase B of Period I.

5. Sherd of red ware. The three extant incised letters are *na*, *ya* and *di* in characters of the third-second century B. C. From Phase A of Period I.

C. TERRACOTTAS

The excavation yielded a rich crop of terracotta finds, of which thirty-three, including a pedestal with the figurine missing, are human figurines, one hundred and fourteen animal figurines, and forty miscellaneous objects, excluding beads (p. 123), bangles (p. 141), a ring (p. 141) and discs of potsherds, the last found in hundreds. Surface-finds number fifty-three; these include eight human figurines and thirty-three animal figurines. Tilaura-kot may, therefore, be claimed as one of the prolific centres of terracotta art of the early historical period.

It appears that terracotta formed the most popular medium not only of the artistic expression but also for the personal ornaments like beads, bangles and rings, documentations like sealings (p. 99), children's toys and objects of domestic and ritualistic needs. Terracotta, in its varied uses and applications, thus, affords us an idea of not only the artistic attainments of the people, but about their life and culture and fashions of the times in respect of dress, coiffure and jewellery.

(i) Human figurines

Out of the excavated thirty-three human figurines, three occur in the upper level of Phase B of Period I, two in Pit I, one each from layer 1, the section-scraping of Phase B and rampart-filling and unstratified deposit and the rest from the rampart-filling, the regularly stratified deposit of Phase A yielding none. Stratigraphy is, thus, of little help in determining the precise date of most of the specimens, of which as many as twenty-five came from the rampart-filling which is a mixed dumping of earth from the earliest to the latest of the pre-rampart settlement.

These figurines hardly reflect any characteristics peculiar to this region alone. Bearing the impress of the trends, tastes and fashions of the artistic movement of the Maurya and Śunga periods, most of them conform to the common denominator of the contemporary terracotta art-tradition of northern and eastern India. Many of them were intended for house-decoration, a presumption substantiated by the suspension-holes occurring in plaques from several sites. The female figures by far outnumber the male as in other centres.

Among these one (from the rampart-filling) at least can be claimed as purely hand-modelled (pl. XXVIII, 4). Crudely fashioned, it belongs to the ageless type.

Available portions of two other specimens (one from the surface and the other from the rampart-filling) are also hand-modelled. The surface specimen is in the round and shows some attempt at modelling (pl. XXVIII, 2). The other figurine (pl. XXVIII, 3), with its flatness, frontality and general archaic treatment of the available portion, is closely allied to the well-known terracotta figurine from Mathura, now in the Museum of Fine Arts, Boston.¹ A pre-Mauryan date has been claimed for the latter by Coomaraswamy,² Zimmer³ and Rowland.⁴ The exact date of this particular specimen from Tilaura-kot cannot be determined in view of its discovery in the rampart-filling. But the possibility of its being dated earlier than the third century B. C., which is the date of the earliest occupational deposit at this particular area, is, however, remote. Three of the figures appear to have a hand-modelled body and moulded face. One (from Pit 1) of these is a female with an ovalish face, dignified expression and applied ornaments of simple design (pl. XXIX, 1). The second (from Pit 1), also female, is represented only by its hand-modelled lower part with lateral projections, perhaps for an applied hooped skirt (pl. XXIX, 3), while the third (from the rampart-filling) is a male, remarkable for its sensitive modelling of the available portion of the head (pl. XXVIII, 1). A Maurya date has been assigned to the figures with similar characteristics. An advanced step in the technique is discernible in two defaced female busts (both from the rampart-filling, pl. XXIX, 2 and 4) with oval faces and decorative details nearly similar to the just-noticed female with a hand-modelled body and a moulded face in that the body is also moulded and the background is flat as in a plaque of the Śuṅga conception of form. The head-embellishment of one (pl. XXIX, 4) of these two includes two applied discs.

Twenty-three specimens, apart from these two, are completely moulded relief-plaques. Added to these are three specimens from the surface. With the exception of two (one from layer 1 and the other from the surface), which have a peculiar dress (pl. XXXIV, 1), all belong to the Śuṅga idiom, whether in its nascency or apogee. Belonging to the varied repertoire of the Śuṅga terracottas, some are executed in low flattened relief, while others come out of the background in fairly high relief. Some, with rigid frontality, stand stiff and still like posts, while others are lively with animated graceful flexions. The degree of modelling also varies, some displaying a disciplined body with very sensitive and subtle modelling. The treatment of the drapery is varied too. Three of the figurines represent mother and child (pl. XXX, 1-3) in a most telling manner and two, one a boy (pl. XXXII, 2) and the other a female (pl. XXXII, 1), are shown with their favourite parrot, a theme popular in literature as well as in terracotta and stone sculpture. The *abhisheka* of Lakshmi is represented by a single specimen, of which a small fragment (pl. XXXIV, 2) alone is extant.

¹ A. K. Coomaraswamy, 'Archaic Indian Terracottas', *Marg*, VI, no. 2, fig. 5.

² *Ibid.*, p. 28.

³ H. Zimmer, *The Art of Indian Asia*, I (New York, 1935), text plate B 3 c.

⁴ B. Rowland, *The Art and Architecture of India* (1954), p. 23.

Of the remaining three excavated specimens, two represent a leg each (pl. XXVIII, 5 and 6), both in the round but one on a thin base, while the third is a fragment of a stepped pedestal (pl. XXXIV, 3). On this flimsy basis it is hazardous to affiliate them to any group.

The surface-finds include a head (pl. XXXV, 1), two legs (pl. XXXV, 3 and 4) and a hand (pl. XXXV, 2), all crudely executed with free hand.

But for a single exception, which has turned smoky due to indifferent firing, all are red, a few having grey patches in the core. Clay used for the purpose is usually fine. Traces of slip in red, generally of deep shade, and chocolate colour linger in most of the specimens.

Below is a descriptive catalogue of the figurines.

1. Torso of a roughly-fashioned figurine, summarily modelled by hand and in the round, of the so-called ageless type. A part of its right arm, horizontally extended and tapering, is preserved. A prominently-large circular depression marks the deep navel. An applied band, with oblique incisions, is placed diagonally on the front part of the body in the form of an *upavāta*. Treated with a darkish-red slip. From the rampart-filling. (TLK-44.) Pl. XXVIII, 4.

2. Hand-modelled torso, of possibly a sturdy male, with portions of the upper part of the arms extant, in the round. From the surface. Pl. XXVIII, 2.

3. Hand-modelled lower part of a female figurine, representing perhaps Mother Goddess, with exaggerated pelvis and stunted tapering stump-like legs without details of toes. The gap between the legs is in the form of an arch. Below the emphasized large sunken navel is an applied girdle, with finger-tip decoration, shown only on the front side. As the upper part is missing, it is not known if the head was impressed from a mould or fashioned by hand. Treated with a darkish-red slip. Badly weathered. From the rampart-filling. (TLK-175.) Pl. XXVIII, 3.

4. Fragment of a youthful male head with bicornate headdress or hair shown in side masses, the proper right-side roll smaller and defaced considerably. There appears to be an elongated raised mark above the nose. Despite its broken and defaced state, the face, with delicately-shaped arched eye-brows and nose and glowing expression, reveals excellent modelling and sensitiveness. Its individuality marks it as distinct from the rest of the figurines found here. The facial physiognomy connects it with detached heads from Bulandī Bagh, commonly assigned to the Maurya date. Badly weathered. From the rampart-filling. (TLK-587.) Pl. XXVIII, 1.

5. Upper part of a female figurine. But for the front part of the head, face and neck which appear to have been pressed out of a mould, the figurine is modelled by hand. The ovalish face, with a faint smile and fleshy lower lip, is remarkable for its subdued but soft lovely expression and noble bearing. The simplicity of the ornaments, though heavy, is effective and has added considerably to the dignity and charm of the

figurine. The hair, parted in the middle, is indicated by inconspicuous bands forming an angle on the forehead. On either side of the parted hair hangs down an applied elongated leaf-shaped band, the latter reminiscent of the loose tress of hair. On the top of each band is the decoration in the form of an applied large disc, below which is a three-pronged tassel, also applied. The central prong of the tassel, issuing from a bud-shaped object and with a somewhat bell-shaped bottom, is straight with two vertical incised lines, while the flanking ones are curved. The nature of the breakage on the crown of the head is suggestive of another attachment, presumably disc-shaped. The jewellery consists of large disc-like ear-ornaments, a broad band-like collar and a plain tight-fitting waist-band, all applied. No attempts were made to model the back portion which is uneven. The delicately-modelled face is on a much higher artistic level than the body. From Pit 1. (TLK-1211.) Pl. XXIX, 1.

6. Upper part of a female figurine with a prominent bust and a smiling oval face. The coiffure and the hair-embellishment in the form of two discs, two with three-pronged tassels, are similar to those of the preceding, but this figurine is moulded and the back side flat. The decoration is more elaborate. The defaced discs were perhaps relieved with floral design, the side ones having by their flank and top some more floral decoration, now defaced. The disc of the proper right ear is similar to that of the preceding, but the left ear-stud is smaller and cylindrical and shown in profile through the ear-lobe. The collar is elaborate with the broader central part decorated. The left arm of the figurine is evidently akimbo. Badly weathered. From the rampart-filling. (TLK-644.) Pl. XXIX, 2.

7. Upper part of a female figurine in relief with back side flat. Analogous to the preceding in general treatment and ornamentation, it is, however, smaller, and the additional decoration for the hair, which formed part of the plaque in the preceding, is here applied and consists of two discs, of which the dexter one is broken. Badly weathered. From the rampart-filling. (TLK-406.) Pl. XXIX, 4.

8. Lower part of a female figurine with the upper portion of its rigid post-like right leg extant. The available part is completely hand-modelled. The girdle is in the form of applied roundels. There is a lateral projection on either side of the hip, which might have acted as a support for a hooped skirt, a presumption partly supported by the broken edge of the applied parts behind them. From Pit 1. (TLK-1049.) Pl. XXIX, 3.

9. Moulded lower part of a female figurine, in fairly high relief, with legs missing. It is clad in a *sāḍī* (indicated by fine oblique combings) closely following the contours of the legs and with frill artistically displayed in front. The lower part of a double-stringed beaded chain, which evidently passed diagonally across the body from its shoulder, is seen on its right thigh. The graceful stance of the shapely legs, with the left delicately bent and the right flexed, is particularly telling. Equally remarkable is the sensitive rendering of the limbs revealed through the drapery. This figurine as well as the following one (pl. XXX, 2) is, no doubt, parts of the plaques containing mother and child, of which a nearly complete but highly-weathered example is furnished by TLK-535 and 760 (pl.

XXX, 1). The damaged left foot of the child is visible near the broken top edge. Treated with a deep-red slip. From the upper level of Phase B of Period I. (TLK-534.) Pl. XXX, 3.

10. Fragment of a plaque with the relief of the portion of draped legs of a female figurine, closely similar to the preceding both in size and treatment. Here the folds of the frill are better preserved. Treated with a deep-red slip. From the rampart-filling. (TLK-114.) Pl. XXX, 2.

11. Plaque entirely relieved with mother and child and complete but for the missing feet and ankles of the mother. Extreme corrosion has deprived it not only of its beauty but most of the details also. Like the preceding two, the female, is standing with graceful flexions. The head is slightly tilted towards the child, held affectionately by both hands on the left hip. The pose of the mother is not only natural but artistic as well. The child, with defaced ear-ornaments and hair-embellishment, is mostly in profile with its left foot hanging immediately below the right hand of the mother. Gathered and tied on the crown of the head, its hair seems to rise in locks as in *śikhāṇḍaka*-coiffure appropriate for a child. Draped like the preceding two and also distinguished by a long double chain which falls diagonally from her left shoulder to the right thigh, the mother is bedecked in rows of bangles, a broad collar and heavy ear-studs. The details of the bun-like coiffure, which is rather plain, are defaced. There is no sign of any girdle; whether it is a deliberate omission or slip is not clear. Highly weathered. From the rampart-filling. (TLK-535 and 760.) Pl. XXX, 1.

12. Fragment of a plaque with the lower part of a female figurine. Parts of the legs are missing. Standing erect without any flexion, the figurine is clad in a *sāḍī* with oblique folds and folded scarf, ends of which are visible by the sides. The rendering of the flowing *sāḍī*, puffed up with wind, with finely-delineated folds, contrasts with the slim, almost post-like, legs. Tasselled strings, possibly six, are seen falling on the thighs. The right hand of the figurine, akimbo, with two heavy bracelets, rests on hip, the hanging left hand holding a part of the folded end of the *sāḍī*. Similar figurines are found in Taxila in levels of not later than the second century B.C.¹ Treated with a red slip. From Phase B of Period I. (TLK-367.) Pl. XXXI, 4.

13. Oblong plaque with a female figurine in rather low relief. The lower parts of the legs are missing. With open eyes and fleshy rounded face, beaming with a faint smile, the figure stands erect with its left hand akimbo, resting on hip, the extended right hand hanging down. The hair seems to be gathered sidewise. The proper left roll, which is larger, is covered by four bands with oblique incisions. The right roll is encircled by a single ornate band. The jewellery consists of a band-like ornament on the forehead, two large ear-studs, one shown in profile and the other, decorated with pin-holes, frontally, a broad collar with oblique incisions, heavy bracelets with pin-holes, a tight-fitting waist-band and a girdle of three beaded strings. Two ends of a folded scarf or the *sāḍī*

¹ J. Marshall, *Taxila*, II (Cambridge, 1951), p. 443.

itself are seen below the girdle. Treated with a darkish-red slip. From the rampart-filling. (TLK-425.) Pl. XXXI, 1.

14. Similar to the preceding and perhaps fashioned out of the same mould. Bust alone is extant. Treated with a red slip. Badly defaced. From the rampart-filling. (TLK-537.)

15. Fragment of a plaque, with a rounded top, preserving the damaged head of a female figurine. The expression of the face, with full cheeks, rounded chin, open eyes and fleshy lips, is happy and radiant. The coiffure is similar to that of the preceding two, but the decoration (consisting of a circle with two flanking U-shaped marks, alternating with two tiny squarish blocks) of the bands on the rolls is carefully done and well-preserved. The visible end of the ear-stud is relieved with a floral motif comprising six circles round a central one. Treated with a darkish-red slip. From the top level of Phase B of Period I. (TLK-113.) Pl. XXXI, 2.

16. Fragment of a terracotta plaque relieved with a female figurine, of which the head alone is preserved. The head is similar to the preceding, but the face is inconspicuously turned towards its left and the head-embellishment is more elaborate. As in the preceding three, the proper right and left rolls have respectively one and four bands, each band decorated with a series of circles. Stuck to the right roll are five, if not six, hair-pins. The heads of three of these pins represent definitely an elephant-goad, an arrow-head and a *paraśu* (battle-axe). The rest are defaced, of which one might have been a banner. The top of the forehead is bedecked with three beaded strings. The proper right ear-stud, shown frontally, has a central pellet surrounded by concentric circles. Perched possibly on the raised left hand of the figure is a long-tailed parrot with beak towards the broken ear-stud. Unfortunately the lower part of this interesting piece is missing, and it is not known if it was similar to the following one. Treated with a darkish-red slip. From the rampart-filling. (TLK-536 and 99.) Pl. XXXII, 1.

17. Fragment of a plaque with a relief of the lower part of a female figurine. The captivating stance, with the bent left leg crossed behind the gracefully-flexed right, is reminiscent of the bracket-females below the bottom architraves of the gateways of Sanchi. The easy posture is effectively matched by the gliding sinuousness and the sensitive modelling of the elongated limbs which has added appreciably to the charm of the figure. The *sāḍī* (indicated by fine oblique folds), with a frill in front, clinging fast to the body, has an almost diaphanous effect. Parallel to the left leg of the figure is a sash, also sinuous. Of the ornaments, the anklet round its left leg and a refined girdle of three beaded strings are alone extant. Treated with a darkish-red slip. Weathered. From the rampart-filling. (TLK-84.) Pl. XXXII, 3.

18. Fragment of a plaque with a relief of the lower part of a female figurine similar to the preceding. Here the edge of the plaque closely follows the contour of the figure. The beaded girdle is comparatively better preserved. The lower portion of a beaded chain may be seen on the left side of the figurine above the well-shaped navel

region. Treated with a darkish-red slip. Weathered. From the rampart-filling. (TLK-261.) Pl. XXXII, 4.

19. Fragment of a plaque with the relief of a boyish figurine, of which the head and feet are missing. Delicate modelling of the erect figure is partially undermined by weathering. The ends of the scarf, which covers the arms and possibly shoulders, are seen hanging artistically by the side of the legs. The figure is richly bedecked with a girdle of triple-beaded string, bangles and necklaces, the latter including a shorter one with amulets. With its left hand, akimbo, on the girdle, the figure holds in its right palm, placed near the chest, a circular object (pomegranate?) at which is pecking a long-tailed parrot perched on the right fore-arm of the figure. Similar figurines have been found at Ahichchhatra,¹ Bhir Mound (Taxila)² and Rupar.³ The specimens from the last site hailed from Period IV and are exceptionally well-preserved. Weathered. From the surface. Pl. XXXII, 2.

20. Fragment of a terracotta plaque with a relief of the chest and middle part of a female figurine. The latter's left hand, akimbo, rests on the hip, the right palm with an indistinct object placed on the chest. Treated with a red slip. Badly weathered. From the rampart-filling. (TLK-1017.)

21. Fragment of a terracotta plaque with a relief of the bust of a female figurine, similar to the preceding. The head and lower portion below waist are missing. The object in the right palm is indistinct here also. Of the ornaments, two collars, one beaded, and bangles are visible. Due to indifferent firing, the specimen is smoky. Treated with a dark-chocolate slip. From the rampart-filling. (TLK-100.) Pl. XXXI, 3.

22. Fragment of a terracotta plaque relieved with a female (?) figurine, of which a part of the hip and thighs are alone preserved. The *sāḍī* is indicated by vertical folds. On the front part of the girdle, of triple-beaded string, is the end of a scarf or *sāḍī*, partially spread triangularly with oblique folds. Treated with a darkish-red slip. Badly weathered. From the rampart-filling. (TLK-742.) Pl. XXXI, 5.

23. Fragment of a terracotta plaque with a relief of the lower part of a female figurine. With its left hand on the hip and the right hanging down, the figurine stands erect on a base projecting from the plaque. With its rigid frontality and stiff pose of the fairly well-modelled limbs, it recalls some of the figures of *yakshas* and *yakshīs* of Bharhut. The treatment of the drapery is both stiff and stylized; one long end of the *sāḍī* is seen falling, across the girdle, on the base vertically like a broad band. The bottom end of this band is with vertical folds. The ornaments include bangles, a girdle of triple-beaded string and anklets. Badly weathered. From the surface. Pl. XXXIII, 1.

24. Fragment of a terracotta plaque relieved with the legs of a female figurine, the latter akin to the preceding. The treatment here, however, is cruder.

¹ *Ancient India*, no. 4 (July 1947-January 1948), pl. XXXV B, 49.

² Marshall, *op. cit.*, p. 448, pl. 133, 28.

³ *Ancient India*, no. 9 (1953), pl. L A.

The anklets are quite heavy. Treated with a darkish-red slip. From the rampart-filling. (TLK-743.) Pl. XXXIII, 2.

25. Fragment of a plaque relieved with a figurine, of which a part of the hip and legs, without feet, are extant. The arrangement of the cloth is somewhat similar to the preceding two. The legs appear to be slightly flexed. Two rows of pin-holes mark the girdle. Treated with a darkish-red slip. Badly weathered. From the rampart-filling. (TLK-771.) Pl. XXXIII, 4.

26. Fragment of a small plaque with a relief of the lower part of a female figurine, standing erect with its right hand on the hip and left hanging. Details of the girdle, bangles and drapery have vanished with weathering. From the rampart-filling. (TLK-758.) Pl. XXXIII, 3.

27. Fragment of a plaque relieved with a figurine, of which parts of the legs and hip are extant in an extremely defaced condition. Faint vertical folds indicate the lower cloth. The left hand of the figurine seems to be hanging. Treated with a darkish-red slip. Badly weathered. From the rampart-filling. (TLK-759.)

28. Fragment of a plaque with a relief of the lower part of the erect legs of a female figurine. The feet, with heavy anklets, rest on a base projecting from the plaque. The *sāḍī* is indicated by prominent oblique folds on the legs, its frill, with vertical folds, having fan-like edge. Treated with a darkish-red slip. From the rampart-filling. (TLK-112.) Pl. XXXIII, 5.

29. Fragment of a plaque with a relief of the lower part of the erect legs of a heavily-draped figurine. The well-modelled feet, with fine anklets made of several beaded strings, rest on a base projecting from the plaque. The folds of the *sāḍī* are prominent. Treated with a darkish-red slip. From the section-scraping of the rampart-filling and Phase B of Period I. (TLK-66.) Pl. XXXIV, 5.

30. Fragment of a plaque with a relief of the lower part of the legs and feet. The heavy anklets are decorated with two rows of pin-holes. The lively pose of the legs, resting on a base projecting from the plaque, may indicate an attitude of dance. Treated with a darkish-red slip. From the rampart-filling. (TLK-233.) Pl. XXXIV, 4.

31. Fragment of a plaque with the feet of a figurine on its projected base. The left foot of the figurine has disappeared. Treated with a darkish-red slip. From the rampart-filling. (TLK-1016.)

32. Fragment of a plaque relieved with the head of an elephant. The upraised trunk of the elephant holds a long-necked conical pitcher. The fragment evidently formed part of a composition of the lustration of Lakshmi. Weathered. Unstratified. (TLK-1223.) Pl. XXXIV, 2.

33. Fragment of a plaque, relieved with a female (?) figurine. The upper portion above the waist and the lower part of the legs with feet are missing. The flounced skirt, with heavy drapes in vertical folds and V-shaped bottom, has completely covered the outlines of legs. Both the hands, with bangles, are placed on the thigh by the side of a

curious oval-shaped plaque covering the middle part. The plaque is decorated with oblique lines. Above it is the close-fitting band round the attenuated waist. The date of this crudely-executed bizarre figure cannot be determined even approximately, as it was found in layer 1. The form of the drapery and the central design at its top seem to suggest an un-Indian idiom, so far as the form and the treatment of the skirt are concerned. (TLK-2.) Pl. XXXIV, 1.

34. Fragment of a plaque with a relief similar to the preceding. But it is a smaller fragment and considerably defaced. From the surface.

35. Left foot of a figurine resting on a thin flat oblong base. The foot is in the round. Weathered. From the rampart-filling. (TLK-101.) Pl. XXVIII, 6.

36. Right foot of a fairly large figurine, entirely in the round. Rather crudely fashioned. Weathered. From the rampart-filling. (TLK-176.) Pl. XXVIII, 5.

37. Fragment of a stepped pedestal for a figurine (?). Weathered. From the rampart-filling. (TLK-757.) Pl. XXXIV, 3.

38. Head and neck of a fairly large hand-modelled figurine with an oval face, an open mouth, incised straight eye-brows, incised lenticular eyes and circular cavities for pupils. Above the temple is a row of punctured dots, which comes down to the cheeks. Crudely fashioned and badly weathered. Red with a grey core. From the surface. Pl. XXXV, 1.

39. Lower portion of the fore-arm of a fairly large hand-modelled figurine. There is a plain applied band for the bangle. Crudely fashioned and badly weathered. Red. From the surface. Pl. XXXV, 2.

40. Foot and the lower part of the leg of a fairly large hand-modelled figurine. There is a plain applied band for the anklet. No attempts were made to model the toes which were made separate by deep incisions. Red with a grey core. From the surface. Pl. XXXV, 3.

41. Foot and the lower portion of the post-like leg of a fairly large hand-modelled figure. There is an applied band for an anklet. The clumsy toes are separated by deep incisions. Red with a grey core. Treated with a red slip. From the surface. Pl. XXXV, 4.

(ii) *Animal figurines*

The terracotta animal figurines from the excavation number one hundred and fourteen (sixteen from Phase A of Period I, twenty-three from Phase B of Period I, thirty from Pit I, forty-two from the rampart-filling, one from layer 2 and two from layer 1. The surface-finds are also fairly rich, being thirty-three. Many of these are, however, portions of the limbs like legs, trunks, tusks and horns which, however, do not fit in with the available trunks. The beasts are hand-modelled and solid throughout. Made of fine-grained clay they are usually red and fairly well-burnt, often with a grey core and sometimes red throughout. Very rarely they are grey all through. These grey specimens,

generally elephants, and a few of smoky-red figurines are treated with a black slip. Usually the ears, horns and tusks are separately fashioned and applied. The chief inspiration in these creations is, no doubt, juvenile interest in toys. Many of the figurines have transverse holes through the snout, nose and trunk, suggesting thereby that they ran on wheels. Whether some of them were intended as votive offerings to deities as practised now cannot be determined conclusively.

The most favourite animal seems to have been the elephant, represented by not less than fifty-two excavated specimens (eight from Phase A of Period I, nine from Phase B of Period I, thirteen from Pit I, twenty from the rampart-filling and one each from layers 2 and 1), twenty-nine being legs, trunks and ears. The surface-finds number not less than five, of which one, nearly complete, is remarkable for its lavish ornamentation, though not for its modelling (pl. XXXVI A, 1). The eyes are stamped diamond-shaped, incised double convex or lenticular with a central raised vertical line (pl. XXXVI A, 3). The ears, applied, are large, often in the form of a winnow, some with a hole; they are sometimes decorated with incised lines (pl. XXXVI B, 8, 11 and 12) simulating veins, pin-holes (pl. XXXVI B, 12) and incised circlets with central dots (pl. XXXVI B, 8). The trunk, in some cases, is realistically modelled (pl. XXXVI B, 6); often it is plain, but is sometimes embellished with stamped motifs, incised decoration or applied band with a row of holes (pl. XXXVI B, 5). The applied tail usually falls on one of the hinder legs. Most of the specimens are quite plain, and some only are adorned with stamped designs like leaves (pl. XXXVII A, 13), solar symbols with or without the circle round the central pellet (pl. XXXVII A, 14, 15 and 16), an eight-spoked symbol (pl. XXXVII A, 13), a four-spoked symbol with a pellet in each angle (pl. XXXVI A, 3) and diamonds or circles with a central punctured dot (pl. XXXVI A, 4 and pl. XXXVI B, 6). Ornaments are rarely represented, the most ornate specimen (pl. XXXVI A, 1) being from the surface. Here applied bands, stamped with circlets, occur on the waist, on the forehead and round the neck and tusks; the neck and waist-bands are distinguished by pendants, also stamped with circlets, the one hanging from the neck-band being bell-shaped. In two cases (one from the rampart-filling and the other from layer 2) the applied band round the tusks are decorated with pin-holes (pl. XXXVI A, 2). The trappings are conspicuous by their absence. But for a single specimen (pl. XXXVI A, 3), all from Phase A of Period I are plain. With a few exceptions, which are grey with a black slip, all are red with a slip, generally red and exceptionally black. In some specimens the toy-maker has exhibited a remarkable sense of form based on close observation of nature and fairly good understanding of the features of the animal. But this realistic vision is lacking in several specimens where the plastic treatment is crude and the body lacks the character of the elephant which can be identified by virtue of its tusks or trunk alone.

The number of bulls and cows with heads extant from the excavation is six (one each from Pit I and layer I and two each from Phase B of Period I and the rampart-filling), all red, and bulls from the surface are more than nine. Usually, the nostrils and

the mouth are clearly indicated by punctured dots (or holes) and an oblong incision respectively. The ears are more often applied than not; two of the specimens from the excavation have a hole in each ear. The eyes are generally diamond-shaped, two specimens, however, having natural shape. The pupil is a punctured dot with or without iris, the latter in the form of a pellet, circular or oval. The eye-brows are usually incised curved lines and rarely a curved row of punctured dots. The dewlap is shown in a single excavated specimen (pl. XXXVII B, 20). Most of the specimens have an applied nose-band generally with oblique incisions. Five of the excavated specimens have a transverse hole through the snout (sometimes the hole-ends are on the nose-band itself) for a string; evidently, these toy-animals ran on wheels. In two excavated examples, one applied band with oblique incisions is shown passing by the front base of one horn and rear base of the second (pl. XXXVII B, 17 and 20), and in one a similar band is seen on the forehead (pl. XXXVII B, 21). Some of the animals are quite plain (pl. XXXVII B, 19), while others are lavishly embellished with stamped designs. The most decorated example (pl. XXXVII B, 17) preserves seven elaborate leaves, one each below the ears and five on the back and sides, and eight-spoked symbols with a pellet in each angle and at the junction, one each on the forehead, hump, root of the tail and front part of the neck and four immediately above the legs. On the forehead of one (pl. XXXVII B, 20) is a punched taurine symbol resembling the Brāhmī letter *ma*, with a punctured dot below and above. Most of the surface-specimens are stamped with solar symbols, eight-spoked symbols, or four-spoked wheels. The modelling of the bulls, whether plain or decorated, is usually realistic and vigorous. The energy and vitality, that are within, are expressed very well in the form. Evidently, the toy-maker was quite at home with this animal.

With these specimens is most probably to be associated a head (from Pit 1) with neck extant (pl. XXXVII B, 18). Its snout is unusually elongated. But the arrangement of the nostrils, mouth, eyes and nose-band and the once-existing horns point to its coming under the bovine species. This one is less truthfully modelled than the preceding ones. Its applied ears have disappeared leaving a rough surface. The snout, neck and head are overloaded with stamped circles, each with a central hole, of which twenty-three are extant.

At least six horses (two from Pit 1, one from Phase B of Period I and three from the rampart-filling) are recognizable amidst the excavated specimens, the number of horses from the surface being not less than four. The excavated specimens are better preserved and usually well-modelled. The eyes are diamond-shaped with a punctured dot or dash for pupil. The nostrils are either circular holes or oblong slits. The manes are, in some cases, plain and, in others, decorated with either oblique incisions (pl. XXXVIII A, 26 and 28) or stamped rows of punctured oblongs (pl. XXXVIII A, 23). Plumes are of common occurrence, one being ornamented with a plaque covered with pin-holes (pl. XXXVIII A, 27). The head-stalls in two cases (one from the rampart-filling and the other from the surface) consist of cheek-straps, which reach as far as the mane, and vertical

face-strap with horizontal front and nose-bands, all applied and incised with oblique lines (pl. XXXVIII A, 27 and 28). The cheek-straps are absent in at least three specimens (pl. XXXVIII A, 23 and 26; pl. XXXVIII B, 29), two from Pit 1 and one from the rampart-filling; both the specimens from Pit 1 originally had a tassel below each end of the front-band, the latter impressed with elongated leaves in one case (pl. XXXVIII B, 29). The neck is decorated in one case (from the rampart-filling) with an applied band and in another (from Pit 1) with a row of stamped leaves of different lengths (pl. XXXVIII A, 23). A single specimen (from the surface) has an applied saddle which rises high in the front and the rear and is incised with a row of slightly oblique lines on either side of a deeply incised line, the latter serving as a girth (pl. XXXVIII A, 24). That detachable saddles were also used for these toy-animals is proved by a find in the rampart-filling (pl. XLI, 1). In four specimens (two from Pit 1, one from the rampart-filling and one from the surface; pl. XXXVIII A, 23 and 28 and pl. XXXVIII B, 29) an elaborate carpet serves for the saddle. The ornate carpet in one specimen particularly deserves notice. It has seven rows of impressed motifs—the first and the third composed of chevrons, the second and the fourth of punctured oblongs, the fifth of small leaves, the sixth of indentations and the last of zigzags (pl. XXXVIII A, 23). Two specimens (one from the rampart-filling and the other from the surface) are stamped with eight-spoked symbols (pl. XXXIX A, 31 and 34). The only other stamped decoration is a leaf found in one specimen (pl. XXXVIII A, 23). Above the nose of another specimen, of which only the snout, modelled with a realistic feeling, is available, is a vertical succession of V-shaped incisions (pl. XXXVIII A, 25). Whether all of them ran on wheels cannot be determined in the absence of full forms. Two (pl. XXXVIII A, 25 and 27) of these have transverse holes, one through the nostrils and the other through the snout, apparently for a string. A third specimen (pl. XXXVIII B, 29), with snout missing, bears three deep holes, one immediately below the neck and two flanking the plume. Beside this horse were found fragments of two solid wheels with hollow hubs having raised ends. If these two, which are considerably large, being 12 cm. in diameter (pl. XXXVIII B, 29A), were meant for this horse, the latter had a base with a transverse hole for the axle-tree.

There is only one specimen (from the rampart-filling) of a ram from the excavation. Its face and lower portion of the legs and applied tail are missing. The horns, possibly applied, with oblique incisions are prominently curved, almost like a circle, round a circular depression. Apart from the two rows of oblique hatchings on the back, there are stamped decorations consisting of a solar symbol, with rays radiating from a pellet, on the root of the tail and seven leaves of different sizes, one each on the thighs and the space between the horns and two on the sides (pl. XXXIX B, 39).

A torso of an indeterminate animal (from Pit 1) is distinguished by an elaborate carpet on its back (pl. XXXIX B, 37). The carpet is divided into six triangular compartments by incised lines radiating from a central incised circle with a punctured dot in the centre. The compartments are filled in with pin-holes, four being distinguished by

an incised circle with a central hole. From each corner of the carpet hangs a floral motif composed of an incised circle with a central dot and pin-holes around the circle. Above the front legs is a circular stamp with a cross and a dot in each of the resultant angles.

Another torso (from Pit 1) has an applied band with a row of incised chevrons. Attached to the band is a pendant, also applied, and stamped with circlets in three rows (pl. XXXIX B, 40).

A surface-find has an applied broad band, with defaced decoration, round the neck (pl. XXXIX B, 38).

Another surface-find is remarkable for numerous irregularly-distributed impressions of a motif with a straight line flanked by raised dots (pl. XXXIX B, 41). Perhaps it represents a spotted deer. The damaged eyes are most probably diamond-shaped.

There are seven (one each from Phase A of Period I, Pit 1 and the rampart-filling and the rest from Phase B of Period I) hollow birds, most of them with a disproportionately swollen body, giving the first impression of rattles. But one out of this group, which preserves the body almost intact, has a transverse hole through the body (pl. XXXIX A, 35) evidently for axles and five of the rest, which have eyes intact, have a hole through the eyes for a string. Presumably, they ran on wheels. In specimens with extant bodies there are two sets of oblique incisions to indicate feathers. The heads of two are missing. Among the rest four bear crest, single (pl. XXXIX A, 32), bicornate and with four projections (pl. XXXIX A, 30); perhaps they were intended for cocks. Apart from these, there is another bird (from the rampart-filling), of which the head along with the long neck is extant (pl. XXXIX A, 33). The eyes are incised circles with a central large pellet. The transverse hole through the beak is evidently meant for a string. All the specimens are red, two with a grey core. Most of them preserve the red slip.

Among the remaining figurines, mention may be made of a damaged head with feline features (from Phase B of Period I), a curious-looking object with four cross-wise sloping projections and tortoise-shaped damaged top (from Pit 1) and the fragment of a *nāga* (from the surface).

The following are selected for illustration.

Pls. XXXVI-XXXIX

1. Elephant, complete but for the missing three legs, tusks and tail. The ears are disc-like with a central shallow hole. The neck, waist and base of the tusks are ornamented with applied bands decorated with stamped circlets, the neck-band being distinguished by a bell-shaped pendant and the waist-band by three pendants, all with stamped circlets. Similar applied band, but crescent-shaped and with two rows of circlets, embellishes the forehead. By the front side of the ears are again two rows of circlets. On the crown is a deep hole. Red. Treated with a red slip. From the surface. (TLK-4.)

2. Forehead of an elephant with its trunk and left tusk missing. Around the root of the tusks is an applied band decorated with pin-holes. Similar pin-holes exist around the eyes. On the forehead also is an applied semicircular band, possibly decorated with pin-holes. The modelling is realistic. Red. Treated with a red slip. From layer 2. (TLK-748.)

3. Head of an elephant with tusks and trunk missing. The eyes are lenticular with a central vertical straight line in relief. Profusely stamped with circular or ellipsoidal impressions with a cross and pellets in the angles. Red with a grey core. Treated with a red slip. From Phase A of Period I. (TLK-665.)

4. Elephant with trunk, tusks and lower portions of the legs and tail missing. The forehead and the partly-damaged ears are decorated with pin-holes, those on the forehead being arranged in two rows of zigzags. There is a diamond-shaped stamp with a central dot above each of the legs and on the back. Red with a grey core. Treated with a red slip. From Phase B of Period I. (TLK-872.)

5. Trunk of an elephant with an applied band embellished with a row of holes. Red with a grey core. Treated with a red slip. From the surface.

6. Trunk of an elephant with a stamped circle round a hole near the top edge. The transverse hole through the trunk is meant for a string. Red. From the rampart-filling. (TLK-226.)

7. Elephant with head, lower portion of the three legs and part of the applied tail missing. The intact leg is curved near the bottom. Red with a greyish core. Treated with a red slip. From Pit 1. (TLK-944.)

8. Ear of an elephant with a tenon-like projection for inserting into the head. Emanating from a common hole are six zigzag lines, representing the veins. By the side of the hole is a cluster of incised circlelets, each with a dot in the centre. Red. Treated with a dark-red slip. From Pit 1. (TLK-938.)

9. Body of an animal, probably an elephant. Head, lower part of two legs and tail missing. Red. Treated with a dark-red slip with black patches. From Phase A of Period I. (TLK-853.)

10. Body of an animal, with head missing. Light grey. Treated with a black slip. From Phase A of Period I. (TLK-1192.)

11. Ear of an elephant with three incised lines radiating from and near a shallow pin-hole. Red with a grey core. Treated with a red slip. From Pit 1. (TLK-945.)

12. Ear of an elephant with a perforation near the edge. Decorated with close but irregularly incised lines and minute pin-holes. Red. Treated with a red slip. From Pit 1. (TLK-879.)

13. Hind torso of an elephant. Stamped with leaves and eight-spoked symbols. Red with a grey core. Treated with a red slip. From the rampart-filling. (TLK-428.)

14. Hind part of an elephant with major portions of the legs missing. Stamped with solar symbols composed of a raised circle with a central pellet and radiating

rays around the circle. Above the symbols are two oblique incisions forming part of another motif. Red with a grey core. Treated with a red slip. From the rampart-filling. (TLK-1018.)

15. Hind part of an elephant with major portions of the legs missing. The extant body and applied tail are stamped with solar symbols with ten rays radiating from a pellet. Red. Treated with a red slip. From Phase B of Period I. (TLK-492.)

16. Hind part of an elephant with major portions of the legs missing. The body is stamped with solar symbols with eleven rays radiating from a central pellet. Red with a grey core. Treated with a red slip. From Phase B of Period I. (TLK-317.)

17. Humped bull, with horns, applied tail, its right ear, three legs and lower part of the fourth leg missing. Stamped with eight eight-spoked symbols with a pellet in each angle and at the junction and seven leaves of different sizes. Applied bands with oblique incisions across the forehead and round the snout. Punctured dots for eye-brows. Hole across the snout above the nose-band for string. Spirited modelling. Red with a greyish core. Treated with a red slip. From Pit 1. (TLK-943.)

18. Head and neck of an animal of bovine species. Horns and applied ears are missing. Profusely impressed with circles round a central hole, of which twenty-three are extant. Of inferior modelling. Red with a grey core. Treated with a red slip. From Pit 1. (TLK-1048.)

19. Humped bull with head, legs and portions of applied tail missing. Absolutely plain. Red with a grey core. Treated with a dark-red slip. From the surface.

20. Head and neck of a bull with dewlap. Its right horn and tip of the left horn are broken. The applied bands across the forehead and round the nose are obliquely incised. Immediately below the forehead is a stamped taurine symbol with a punctured dot below and above. The transverse hole below the nose-band is meant for a string. Red with greyish patches in the core. Treated with a dark-red slip. From layer 1. (TLK-1.)

21. Head of a bull or cow with horns missing. On the forehead is an applied band with incisions. The applied nose-band has disappeared leaving a depression. The transverse hole for string passed through the nose-band. Red with a greyish core. Treated with a red slip. From the top of Phase B of Period I. (TLK-1094.)

22. Head and upper part of the neck, perhaps of a bull. One end of the transverse hole is through the applied nose-band (mostly missing), the other end being immediately above. Well-modelled. Red with a grey core. Treated with a red slip. From the rampart-filling. (TLK-739.)

23. Horse, with head, lower parts of the legs and tail missing. The mane is represented by a series of oblique rows of punctured oblongs, the top ridge being indented. The unslipped part below the ears and in continuation of the missing front-band is indicative of an applied tassel. Around the base of the neck is a row of finely-impressed leaves of different lengths, the longest two being at the ends. The two hind legs have also a leaf each above them. The richly-embroidered carpet which serves for a saddle is worthy of notice. Red. Treated with a bright-red slip. From Pit 1. (TLK-531.)

24. Torso of a saddled horse. The applied concave saddle, with two rows of incisions, has a deeply-incised central line meant for the girth. Red with a grey core. Treated with a red slip. From the surface.

25. Snout of a horse with prominent oblique slits for the nostrils and slightly gaping mouth. The transverse hole through the nostrils is meant for a string. Above the nose is a row of V-shaped incisions. The modelling is realistic. Red. Treated with a red slip. From the top of Phase B of Period I. (TLK-132.)

26. Head and neck of a horse with snout broken. The mane is indicated by oblique incisions. The applied front-band is decorated with a row of pin-holes. Red. Treated with a dark-red slip. From the rampart-filling. (TLK-772.)

27. Head and neck of a horse. The head-stall consists of cheek-straps reaching as far as the mane and vertical face-strap with horizontal front- and nose-bands, all applied. Only the cheek-straps and front-band, both with oblique incisions, are extant; other bands have disappeared leaving depressions. On the plume is an ellipsoid plaque, full of pin-holes. The transverse hole, one end of which passed through the nose-band, is meant for the string. Red with a grey core. From the surface.

28. Head, neck and shoulder of a horse. The plume and mane are incised with oblique lines. The head-stall consists of cheek-straps reaching up to the mane and front- and nose-bands, all applied. A remnant of the applied neck-band exists on its left side. Four patterned rows of the carpet are faintly traceable. Red. Treated with a bright-red slip. From the rampart-filling. (TLK-426.)

29. Horse, with snout and major parts of the legs and tail missing. The mane is solid without any incisions. The carpet is represented by four indented rows. Of the head-stall, only the applied front-band, impressed with two leaves, is extant. The vertical applied face-strap has disappeared leaving an unslipped portion. Below either end of the front-band is an unslipped part which presumably contained the tassels. There are three deep holes, one each on either side of the broken plume and the third below the neck. Red. Treated with a bright-red slip. Found by the side of a solid wheel with a clearly-defined hollow hub (pl. XXXVIII B, 29 A). From Pit I. (TLK-530.)

30. Head and neck of a bird, perhaps cock, with an elaborate crest and hole through the eyes. Red. Treated with a red slip. From phase B of Period I. (TLK-645.)

31. Body of a horse with major parts of the legs, head and tail missing. The entire body, including the mane, is stamped with indifferently-fashioned eight-spoked symbols. Red with a grey core. From the surface.

32. Head, neck and portions of the body of a bird, perhaps cock, with a crest and a hole through the eyes. Red. From Phase B of Period I. (TLK-315.)

33. Head of a bird with a long neck. The eyes are incised circles with a large pellet. The transverse hole is meant for a string. Red with a grey core. From the rampart-filling. (TLK-538.)

34. Front part of the body of a horse, with major parts of the legs missing. The mane is damaged. Stamped with neatly-executed eight-spoked symbols. Red with a grey core. Treated with a red slip. From the rampart-filling. (TLK-427.)

35. Headless bird with a disproportionately swollen body and oblique incisions. The transverse hole is meant for axles. Red. From Pit 1. (TLK-1093.)

36. Front part of a bird with crest broken. The head is slightly turned to the dexter. Incised lines are on the body. The hole through the eyes is meant for a string. Red with a grey core. Treated with a red slip. From Phase B of Period I. (TLK-642.)

37. Torso of an indeterminate animal remarkable for the elaborate carpet on its back. Above the front thighs is a cross with a pellet in each angle. Red with a grey core. Treated with a red slip. From Pit 1. (TLK-1047.)

38. Portions of the neck and front legs of an indeterminate animal with a decorated broad applied band round the neck. Red. From the surface.

39. Ram, with face, lower portion of the legs and applied tail missing. The horns are obliquely incised. The decoration consists of oblique hatchings, stamped leaves of different sizes and a stamped solar symbol. Red. Treated with a red slip. From the rampart-filling. (TLK-491.)

40. Torso with an applied band incised with chevrons and an applied pendant stamped with circlets. Red with a grey core. Treated with a red slip. From Pit 1. (TLK-914.)

41. Deer (?) with front part of the face and major portion of the legs and tail missing. Profusely stamped with a motif having raised dots flanking a straight line. Red. From the surface.

(iii) *Toy-carts and toy-wheels*

Of the toy-carts there are only three specimens, one (from layer 2) from the excavation and two from the surface, all red, one with a grey core. The excavated specimen (pl. XL A, 1) is in the form of the bust of an animal, possibly a ram with diamond-shaped eyes. A band with oblique incisions has been applied on the forehead. There is a large transverse perforation for the axle-tree through the rear part, the top part of the neck having a deep socket for a pole. One (pl. XL A, 3) of the two surface-finds resembles the excavated specimen in the transverse perforation and the socket, but the body containing the perforation is more cylindrical and the front, which is mostly broken, is bifurcated. Possibly there were two heads. If the extant raised part with oblique rows of punctured oblongs formed part of the mane, heads were those of horses. The bottom surface is criss-crossed with indentations. The second surface-find (pl. XL A, 2) is a light chariot. The car is protected by a raised front and sides, the back being open. As the top of the raised part is broken, it is not known if the sides sloped towards the rear or the tops of the front and sides were curved. Through the central part of the body runs a hole for the

axles. The top surface of the rear part immediately beyond the axle-hole is decorated with three stamped flowers composed of eight raised pellets, one being in the centre, and radiating raised rays beyond the pellets; below the flowers are three horizontal zigzag lines in pin-holes, beneath which are vertical lines, also in pin-holes. Similar flowers, four in number, occur on the front part, which is further embellished with a stamped solar symbol.

There are only eight wheels (six from Pit 1 and two from Phase B of Period I), all solid. Four (three from Pit 1 and one from Phase B of Period I) are double convex, almost lenticular, and one (from Pit 1) is plano-convex with a vertical edge, the remaining three being absolutely flat. None of them shows spokes and felloes. In two cases (both from Pit 1), both flat, the hubs are mere perforations, in further two cases (one from Pit 1 and the other from Phase B of Period I) one end of the perforation has an inconspicuously raised rim and in one case (from Phase B of Period I) both the ends of the perforation have inconspicuously raised rims, the remaining three specimens showing heavy and clearly defined hubs with prominently raised rims, the illustrated specimen (pl. XXXVIII B, 29A) having been found with a horse (p. 111, pl. XXXVIII B, 29). The diameters vary from 12 cm. to 4.2 cm. With a single exception which is grey with a black slip, all are red with a red slip, one having grey patches due to indifferent firing and a second grey core.

The illustrated specimens are listed below.

Pl. XL A

1. Two-wheeled toy-cart with front in the semblance of the head and neck of an animal, perhaps a ram. The socket inside the neck is meant for a pole. Red. From layer 2. (TLK-1193.)
2. Two-wheeled light chariot with three sides partly covered, the rear side being open. Decorated with stamped flowers and a solar symbol, and zigzag and vertical lines in pin-holes. Red. From the surface.
3. Two-wheeled toy-cart with a bifurcated front possibly having the heads of two horses. Red with a grey core. From the surface.

(iv) Miscellaneous objects

Miscellaneous excavated terracotta objects include discs, balls, a saddle, stoppers, cylinders, ear-studs, a casket-lid, a finial, flesh-rubbers, etc.

Discs, fashioned out of potsherds and belonging to different Periods, were found literally in hundreds. Most of them are red with a red slip, only a few being grey with a black slip (pl. XLIIA, 13) and black-and-red. The flat parts of the pots were selected for the purpose, though there are cases where even the rim was turned into a disc. No attempts

were made to decorate them, but some bear painted bands inherited from the original vessels themselves. Only one specimen (from layer 2) of regular disc of normal size has been recovered from the excavation. The discs were presumably intended to be used as gaming-counters or hopscotch-discs. Apart from these there are six small tablet-like discs (three from Pit 1, two from Phase B of Period I and one from the rampart-filling), varying from 1.6 cm. to 1.1 cm. in diameter and from .5 cm. to .3 cm. in thickness. With a single exception, which is grey, all are red, one preserving the red slip (pl. XLII A, 14).

There are four balls (two each from Phase B of Period I and Pit 1; pl. XLII A, 11), all small, with diameters varying from 2.2 cm. to 1.1 cm. All are red. Slip, if there was any, has disappeared.

Of uncertain purpose is a triangular object (from Phase B of Period I) with one side flat and the other convex (pl. XLII A, 9).

There is a single specimen of the saddle (from the rampart-filling), with a convex bottom. It rises high in front and rear, with oblique incisions on the ridges. A band, with a row of pin-holes, has been applied on the central part of the concave top to serve as the girth (pl. XLI, 1).

Stoppers number six (two each from Phase B of Period I, Pit 1 and the rampart-filling). Particularly noteworthy among these is one in the form of a sun-flower (pl. XLI, 4) with ten fairly large petals in two layers. The upper petals, all applied, have on them thin petals, ten extant, around a large central roundel, also applied. The second stopper (pl. XLI, 5) is conical with a projected flat rim and a central socket on the top surface. Nearly cylindrical is the form of a third stopper. The remaining specimens are elongated conical (pl. XLI, 7), one truncated at the bottom and the rest with the bottom missing. But for a single specimen, which is grey, all are red, two being smoky. Red slip is extant on a single specimen.

There are two solid cylinders (one from Pit 1 and the other from the rampart-filling) with a smoky-grey surface. The maximum diameter of one (pl. XLII A, 15), with inconspicuously sloping sides, is 4.4 cm., its length being 2.8 cm. The other, with a red core, is broken; its extant length is 3.5 cm., the diameter being 3.2 cm.

Of the two ear-studs (both from the rampart-filling), both reel-shaped and of smoky-red colour, one (pl. XLI, 2), 2.1 cm. long and 3 cm. in maximum diameter, is absolutely plain and the other (pl. XLI, 6), 1.3 cm. long and 2.1 cm. in maximum diameter and of good workmanship, is decorated with concentric grooves around a central conical pellet on either face, the latter slightly concave. Both the raised ends of the latter specimen bear indentations, the concave middle also having incised lines.

An exceptionally well-made circular lid (from Phase B of Period I), possibly of a toilet-casket, is remarkable for its brilliant polish and well-burnt fabric (pl. XLI, 3). With a slightly-projected flat rim and 5 cm. in diameter, it has a convex top, the latter with groups of fine concentric grooves. On the crown is a tiny pellet in the centre of a fine ring enclosed by a concave circle.

A single hollow conical object (from Phase B of Period I), with five gradually diminishing disc-like projections (pl. XLII A, 10), represents a finial. Both the top and bottom parts are missing. The extant height is 15.2 cm.

A roughly-made disc (from the rampart-filling) of coarse fabric, 11.2 cm. in diameter (maximum) and 2 cm. thick, with a sloping edge having oblique incisions, is perhaps meant to be a flesh-rubber. The larger face is incised with criss-crossed diamonds (pl. XLI, 8).

There is a curious fragment of a hollow shapeless object (from Pit 1). It is remarkable for a relief of three rows of collared beads (pl. XLII A, 12).

Set into another fragment (from the rampart-filling) are extant two rows of tiny stone pieces (pl. XL B, 20). Similar objects were found usually in the level of the N. B. P. Ware at Ahichchhatrā, Rupar, Hastināpura, Rajghat and Alamgirpur. Most of the better-preserved specimens from these sites are shaped like mullers. The face bearing the stone chips, in some specimens, has a worn-out surface due presumably to prolonged grinding.

The surface-finds number ten, of which two are reel-shaped ear-studs, two fragments of solid dabbers (pl. XLII B, 16), two fragments of muller-shaped objects (pl. XLII B, 19), one stamp with a solar symbol (pl. XLII B, 18), one fragment of a mould (pl. XLII B, 17) for ornaments (?), one fragment of a stopper (?) and one fragment of a cylindrical object with a central perforation. The central part of the muller-shaped objects has parallel ridges, the depressed part having oblique incisions.

The following selected specimens are illustrated.

Pls. XL B, XLI and XLII

1. Saddle with an applied girth. Red with a red slip. From the rampart-filling. (TLK-174.)
2. Reel-shaped ear-stud. Smoky-red. From the rampart-filling. (TLK-167.)
3. Lid of a toilet-casket (?). Black with a black slip. From the top of Phase B of Period I. (TLK-231.)
4. Flower-shaped stopper. Red. From the rampart-filling. (TLK-28.)
5. Conical stopper with a projected rim and a socket on the top surface. From Phase B of Period I. (TLK-313.)
6. Reel-shaped ear-stud with concentric grooves round a pellet on either face and indentations on the ridges. Smoky-red. From the rampart-filling. (TLK-166.)
7. Elongated conical stopper with bottom missing. Smoky-red. From Pit 1. (TLK-1148.)
8. Flesh-rubber (?) with incised criss-crossed diamonds on one side. Red with a grey core. From the rampart-filling. (TLK-394.)

9. Triangular object, plano-convex in section. Red. From Phase B of Period I. (TLK-311.)
10. Finial with five disc-shaped projections. Red. Treated with a red slip. From Phase B of Period I. (TLK-490.)
11. Ball. Red. From Pit 1. (TLK-1175.)
12. Fragment of an indeterminate object with three rows of collared beads in relief. Red with a grey core. From Pit 1. (TLK-939.)
13. Disc fashioned out of a grey potsherd with a black slip. From Phase A of Period I. (TLK-706.)
14. Small tablet-like disc. Red with a red slip. From Pit 1. (TLK-601.)
15. Cylinder with a smoky surface. From the rampart-filling. (TLK-744.)
16. Dabber with a solid handle. Red with a grey core. From the surface.
17. Mould for ornaments (?). Smoky-red. From the surface.
18. Stamp with a solar symbol. Red with a dark-red slip. From the surface.
19. Muller-shaped object. Red. From the surface.
20. Fragment of a mulier (?).

D. STONE OBJECTS

Apart from beads (p. 123) and bangles (p. 142), there are thirty-one objects of rocks and minerals. It appears that stone, though within a fairly easy reach, was not a common medium, albeit minerals were in frequent use for luxury articles like beads. Except for querns and mullers there are scarcely any domestic articles of daily use in stone. The find of a fragmentary stone-set terracotta object, presumably a muller (pl. XL B, 20), reveals that even such objects, for which stone is essential, were manufactured in terracotta, the latter forming the most popular plastic material, as in the riparian plains, evidently for its easy tractability.

Nine (one each from Phase B of Period I, Pit 1, and layer 2, four from the rampart-filling and two from the surface) are fragmentary slabs of querns, mostly of fine-grained sandstone, some of them highly polished by rubbing. The fragments are all small with the exception of two. Of these two, both stool-querns,¹ one (from Pit 1) preserves one of its four legs and the other (from Phase B of Period I) two, these tapering legs being roughly a quadrant in cross-section near their root. The one with two legs extant (pl. XLIII A, 2) measures 25.8 cm. (maximum extant length) × 16.2 cm. × 14 cm. (high). It has, near a corner, a shallow circular depression, the latter evidently for holding the pounded stuff. On its bottom side is a lenticular depression which has no doubt been

¹ Similar querns have been found in the pre-200 B. C. settlement of Bhīr Mound (Taxila); cf. J. Marshall, *Taxila*, II (Cambridge, 1951), p. 486.

caused by the sharpening of tools. The top surface of this and also of most of the other fragments is scored with rows of oblique strokes to make the surface uneven for fine grinding. These incisions are often arranged in such a way that the assemblage presents the appearance of parallel zigzags.

The mullers, all in small fragments, are eight in number (one each from Phase A and Phase B of Period I, two from the surface and the rest from the rampart-filling). Their cross-sections are variably circular (pl. XLIII A, 1), plano-convex and oblong (or squarish). The specimen from Phase A of Period I, oblong or squarish in cross-section, has on one of its sides a depression presumably due to its long use.

Of special interest are five fragments of flat discs (two from Phase B of Period I and the rest from the rampart-filling), remarkable both for their high finish and polish. Two of them are tiny bits, one of which might have been a part of one of three larger fragments. Besides these, there is a tiny flat piece (from the rampart-filling) of chalcedony with one face polished. Whether it formed part of a disc or not cannot be determined at its present state. The diameters of the three larger fragments, when complete, were 8.65 cm. (pl. XLIII B, 6), 7.3 cm. (pl. XLIII B, 4) and 5.28 cm. (pl. XLIII B, 3), their thickness being .25 cm., .3 cm. and .6 cm. respectively. Their edge, of varying width, is bevelled with an excellent finish. Without exception they are fashioned out of white agate. That particular care was taken in the selection of the material is shown by the fact that a small section of the thickness comprising the bottom part is opaque in contradistinction to the upper section which is translucent in all cases. Evidently, they were articles of some value, though their exact use has not yet been determined. A similar specimen, in chalcedony, was recovered from a late level of Period IV at Hastināpura where it has been described as a casket-lid.¹ These roundels appear similar to the flat discs found at Bhir Mound and Sirkap in levels ascribed to the third and second centuries B. C.² The discs from Taxila vary from 5 to 7.6 cm. in diameter and .25 cm. to .5 cm. in thickness. According to Marshall, who significantly named the material as porcelain-agate for its peculiar structure, they were intended for inlay-work. At Sirkap were found in a store-jar of the Indo-Parthian period three such broken roundels along with other objects forming part of the stock-in-trade of a lapidary or jeweller.

A single specimen (from Phase B of Period I, pl. XLIII B, 7), of unidentified rock, of the ball was found. Two fragments of tapering rods of slate (one from Pit 1 and the other from the rampart-filling) are circular in section; they might have been parts of antimony-rods (pl. XLIII B, 5).

A flat fragment of a lathe-turned plate (?) (from the rampart-filling), of reddish steatite, bears on its unpolished surface a series of fine concentric striations, while on its finished face are three concentric circular incisions near the centre and a roughly cross-shaped incision near the broken edge (pl. XLIII B, 9).

¹ *Ancient India*, nos. 10 and 11, 1954 and 1955, pl. I, 12 and p. 90.

² Marshall, *op. cit.*, p. 505.

Fragments of two small toilet-caskets (?) of mottled steatite were found in Phase B of Period I. One of these has a vertical internally-bevelled rim, recessed from the globular body, the latter's top acting as an oblique flange (pl. XLIII B, 11) to receive the lid. The other, with a vertical featureless rim, has a horizontally-grooved ledge or moulding projecting from the top of the body (pl. XLIII B, 10). The third object (from Phase B of Period I) of mottled steatite, also a fragment, is rather enigmatic. It presents the appearance of a grooved bangle or large ring, square in section, with ornate projections above and below at intervals (pl. XLIII B, 8). The base of one such projection is now extant. This base branches into two; the possibility of each division joining the ring at a certain distance in the form of a semicircle is suggested not only by the curvature of the available portions, but also by rough parts (indicative of breakage) of the top and bottom surface of the ring, otherwise finished.

The remaining specimen (from Pit 1), in white chalcedony, is too damaged to be identified.

The following select specimens are illustrated.

Pl. XLIII

1. Fragment of a cylindrical muller; sandstone. From the rampart-filling. (TLK-493.)
2. Fragment of a stool-quern; sandstone. From Phase B of Period I. (TLK-565.)
3. Fragment of a disc with a bevelled edge; agate. From Phase B of Period I. (TLK-62.)
4. Fragment of a disc with a bevelled edge; agate. From the rampart-filling. (TLK-107.)
5. Fragment of an antimony-rod (?); slate. From Pit 1. (TLK-1152.)
6. Fragment of a disc with a bevelled edge; agate. From the rampart-filling. (TLK-868.)
7. Ball; unidentified rock. From Phase B of Period I. (TLK-355.)
8. Fragment of a grooved large ring-like object with ornate projections; steatite. From Phase B of Period I. (TLK-376.)
9. Fragment of a plate (?); steatite. From the rampart-filling. (TLK-768.)
10. Fragment of a toilet-casket (?); steatite. From Phase B of Period I. (TLK-566.)
11. Fragment of a toilet-casket (?); steatite. From Phase B of Period I. (TLK-564.)

E. BEADS¹

Considering the limited area under excavation, the number of beads is rather prolific. The operation yielded three hundred and seventy-six specimens including five (one fragmentary) pendants, two plano-convex blocks for cemented eye beads, two partially drilled leaves of amethyst (p. 128, foot-note 3) and an undrilled but polished roughly diamond-shaped tabular topaz piece (not illustrated) which might as well have been used for being set in an ornament. Of these finds, one hundred and thirty-three are of terracotta, sixty-seven of glass, fifty of bone, thirty-eight of agate, twenty-eight of rock-crystal, twenty-one of carnelian, nine of chalcedony, seven of garnet, four of amethyst, three of jasper, three of frit and one each of topaz, aventurine, citrine, garnetiferous micaceous gneiss, silver, copper, shell and paste, besides five of unidentified material. Apart from these there are twelve beads picked up from the surface. Five of them are of terracotta, two of black opaque glass with white spirals, two of blue glass (pl. XLV, 64) and one each of carnelian (pl. XLIV, 27), orange opaque glass and an unidentified material (pl. XLV, 39). The most common bead-material among the minerals is, thus, quartz with its crystalline and cryptocrystalline varieties.

Some of these beads are unbored indicating thereby that bead-manufacture was a local industry. The find of a partly-worked piece of chalcedony (from Phase B of Period I) and a hexagonal rock-crystal in its natural formation (from Pit 1) also points to the same conclusion. It is evident that lapidary art had attained a fairly high level. The lapidist exercised judicious selection of the material within their reach and improved on the natural form of the minerals by careful shaping with a sense for proportion and fine polishing. They excelled not only in *cabochon*-cuts but in faceted cuts which brought out to marked advantage the colour and brilliancy of the material. Thus, some minerals like green jasper and garnet, which are of deep colour and appear almost drab when cut in the ordinary way, were usually given faceted cuts (pl. XLV, 69 and 70), which enhanced their attractiveness and consequent value. Agate was frequently fashioned in such curved surfaces as would display the banding effectively. The bead-maker also exhibited a keen sense of decoration and great skill in the manufacture of etched beads (pl. XLIV, 1 to 13) of chalcedony, agate and carnelian, cemented eye beads (pl. XLIV, 23 to 26) of chalcedony and agate, glass beads with spirals (pl. XLIV, 16 to 18) and longitudinal stripes (pl. XLIV, 14 and 15) and grooved beads (pl. XLIV, 19 to 22) of bone and silver. Special types of pendants like the sword (pl. XLIV, 29), dagger (pl. XLIV, 31) and animal-claw or -tooth (pl. XLIV, 30) were presumably intended to avert evils. Similar magical powers might also have been ascribed to the eye beads. The perforation in the mineral beads is usually fine, the drilling being from both ends in many cases.

¹ The beads have been classified generally on the lines laid down by H. C. Beck in his 'Classification and Nomenclature of Beads and Pendants', *Archaeologia or Miscellaneous Tracts relating to Antiquity*, LXXVII (1928), pp. 1 ff.

The number of beads from the regular stratified deposit of Phase A of Period I is limited. This is, no doubt, due to the extremely limited area in which this Phase was touched. There are only eighteen beads, one each of agate (pl. XLV, 51) and carnelian, two of rock-crystal (pl. XLV, 68), six of bone (pl. XLIV, 21), two each of glass (one unbored) and frit (one unbored), three of terracotta (pl. XLVI, 76) and one of unidentified material. They, however, bear enough witness to the fact that bead-making was a well-established industry from the very beginning of the habitation at this particular area. Specimens of etched beads, cemented eye beads and glass beads with spirals and stripes have not been obtained from this Phase, which may be purely accidental.

The total number of the etched beads, nine in agate, eight in carnelian, three in chalcedony and one in indeterminate material,¹ is twenty-one including a specimen (pl. XLIV, 8) with four inconspicuous zonal grooves, the latter perhaps due to the flaking of the applied colour. In eighteen of these the patterns are in white on natural background and in one (pl. XLIV, 4), the design, in black, is on the whitened surface. The remaining one (pl. XLIV, 10), a rather worn-out specimen, bears on its natural surface pattern in greenish black, diffused with greyish white. Whether this discolouration is due to some extraneous factor in the course of use, to the technique of black-on-white or to the use of black alone has not been determined by chemical analysis. If it is a case of black-on-white, then the black has affected the white completely, indicating thereby an alteration of the technique. If the third alternative holds good, we have to assume that the black was not mixed properly with the result it has spread, producing an unequal distribution of the colour. In that case all the three processes for etching used to be practised here. Incidentally, it may be mentioned that one (not illustrated) of the agate beads, a spherical specimen with flattened ends, which has slightly curved zonal bands in dark brown and bluish white, bears round the hole-ends patches of black, distinctly crackled. In case the colour is not natural, the bead was presumably intended for an eye bead by the third process of etching. Most of the patterns have a fairly wide distribution both in space and time.² The most popular motif seems to have been a large number of plain white spots, in minute dots or dashes, all over the spherical body, represented by nine examples. In six of them (four, three in red agate and one in carnelian, from the filling of the mud rampart and two, one in pink agate and the other in brownish-white chalcedony, from layer 2) the spots are arranged in concentric circles, the number of the latter varying from five to eight (pl. XLIV, 1), in two (both, one in red agate and the other in carnelian, from Pit 1) the arrangement is spiral (pl. XLIV, 2) and in the remaining ninth (in carnelian, from Pit 1) may be discerned something approaching a pattern made by four sets of double convex lines (in dashes) converging at the extremities and enclosing two dashes within the resultant lenticular compartments (pl. XLIV, 3). Four of these beads show under a powerful magnifying glass minute natural spots of deeper red tinge, one having

¹ The entire surface of this bead including the space round the perforation has been whitened.

² M. G. Dikshit, *Etched Beads in India*, Deccan College Monograph Series (Poona, 1949).

the spots arranged in more or less concentric bands and the second in wavy bands. The device next in order of frequency is a group of zonal bands, etched round four beads—one (in carnelian, from the rampart-filling) standard cylindrical circular with two zonal bands (pl. XLIV, 6), the second (in carnelian, from Pit 1) long cylindrical circular with three bands (pl. XLIV, 7), the third (in chalcedony, from Pit 1) long cylindrical circular with four colourless grooves (pl. XLIV, 8) and the fourth (in chalcedony from Pit 1) long inconspicuously convex circular with six bands on the extant part (pl. XLIV, 9). Somewhat allied to this group is a carnelian long barrel circular bead (from the rampart-filling) with six zonal bands in greenish black, the central four consisting of dots (pl. XLIV, 10). A further elaboration of the zonal bands is furnished by a carnelian long convex ellipsoidal bead (from Phase B of Period I) with three zones where the central band has been crossed by thirteen small horizontal lines (pl. XLIV, 11). Three long convex beads, one with elliptical transverse section in black agate (from the rampart-filling; pl. XLIV, 12), the second with circular transverse section in red agate with fine fortification-bands round a pinkish rhomboid (from the rampart-filling) and the third, a broken piece, in carnelian (from Pit 1), have two connected rows of five pentagons each with a marginal band near the ends. The same motif but without marginal bands occurs on a spherical bead of banded black agate (from the rampart-filling; pl. XLIV, 13). A second spherical agate bead (half only extant, from Pit 1) bears on its perimeter a slightly wavy band, the latter closely following the natural whitish band (pl. XLIV, 5). The specimen etched with the second process is also spheroid (from Phase B of Period I). Its entire body has been whitened. On this whitened surface are a black band round the perimeter and a circular black patch around one of the hole-ends (pl. XLIV, 4). It appears to be an eye bead, though the hole is not through the zonal band.

In addition to the etched agate beads there are twenty-nine beads in agate including onyx. Out of these, ten spherical beads (three from Pit 1 and the rest from the rampart-filling) have the colour of carnelian and sard, but a powerful magnifying glass shows that nine are finely banded and one is mottled. Two of these (one from Pit 1 and the other from the rampart-filling) are undrilled. One fragment each of two more spherical beads (one from Phase B of Period I and the other from Pit 1) was found. Both have smoky grey (in dark and lighter shades) surface with tiny curls in black and wavy bands in dark grey, the inside being bluish white. Though the two pieces do not fit each other, they might have been fragments of one bead. Four faceted whitish beads, with bands in very light colour, are of special interest. They were cemented eye beads similar to those found at Taxila.¹ Two (one from Pit 1 and the other from Phase B of Period I) are short truncated bicone pentagonal with twelve circular flats including one each at the end; but for these ground flats, both would have been spherical. Of these two, one (pl. XLIV, 24) is preserved to its three-fourths, but it has a plano-convex block of red banded agate

¹ H. C. Beck, *The Beads from Taxila*, Mem. Arch. Surv. Ind., no. 65 (Delhi, 1941), pl. II, 41, 44 and 45.

third (from the rampart-filling) long truncated inconspicuously bicone circular (pl. XLV, 56) and the fourth (from Phase B of Period I) cylinder disc circular.

Of the garnet beads, all of the Almandite variety, three (two from Phase B of Period I and the third from Pit 1) are lug-collared cornerless cubes (pl. XLV, 69), one (from Pit 1) long cylinder hexagonal with two sides much broader than the others (pl. XLV, 62),¹ one (from the rampart-filling), of which the horizontal half alone is extant, long barrel rectangular (pl. XLV, 52), one (from the rampart-filling) roughly ellipsoid semicircular (pl. XLV, 33), a noteworthy shape resembling a scaraboid, and the seventh (from the rampart-filling) long biconical circular.

All the four amethyst beads are of fine material and pleasing colour. One (from Phase B of Period I) is long convex hexagonal with two sides much wider than the others (pl. XLV, 48), the second (from the rampart-filling) is short truncated bicone (slightly twisted) triangular (pl. XLV, 66), the solitary example of its kind here,² and the remaining two (one from Phase B of Period I and the other from the rampart-filling) long leaf-shaped plano-convex (pl. XLV, 67). The last two are partly drilled.³

One (from Phase B of Period I) of the jasper beads is a standard twisted double pentagon, in deep green opaque, with twenty facets—five oblongs at each end and ten triangles round the perimeter (pl. XLV, 70). The second (from Phase B of Period I), in dark-red opaque, is spherical, but unbored. The third (from Pit 1), in dark green, is long convex circular.

The solitary specimen (from Pit 1) in aventurine is long barrel hexagonal with two sides much wider than the others. It is highly polished presenting the opalescent effect.

The citrine bead (from Pit 1), of excellent finish and transparency, is long cylinder hexagonal (pl. XLV, 63).

Garnetiferous micaceous gneiss is represented by a single long truncated bicone elliptical bead (from layer 2; pl. XLV, 55), a rather worn-out specimen.

The silver bead (from Pit 1), with hollow inside, is spherical and ribbed with horizontal groovings (pl. XLIV, 22). This particular bead is somewhat similar to the smaller gold ribbed beads of Bhir Mound (Taxila) where, however, they are collared.⁴

¹ Beads of identical material and shape were found within the Main Stūpa at Piprahwa (District Basti, India).

² A similar bead, also in amethyst, was found at Bhir Mound (Taxila, Pakistan); *The Beads from Taxila*, pl. IV, 4.

³ These two partially-drilled leaves were not intended for beads. The author noticed similar leaves, also partially bored, amidst the objects recovered from the stūpa of Piprahwa (District Basti). A copper wire was seen fixed to the perforated part in a few specimens. Evidently, they were not meant to be perforated fully and consequently they were not used as beads. There is a possibility of their use as hair-pins. As the author had the opportunity of seeing the objects of Piprahwa only after the despatch of antiquities of Tilaura-kot to Kathmandu, she could not make any changes in the plate.

⁴ *Ancient India*, no. 1 (Jan, 1946), p. 32.

Amidst the relic-deposit within the Main Stūpa at Piprahwa (District Basti, India) occurred an analogous bead.

The shape of the copper bead (from the rampart-filling) is oblate disc elliptical (pl. XLV, 43).

Cylinder disc circular is the form of the shell bead (from Pit 1; pl. XLV, 40).

The specimen (from Pit 1) in white paste is tiny and short cylinder circular (pl. XLV, 42).

Though the bone beads are quite abundant, a few alone are interesting. The commonest shape, spherical with two ends slightly flattened, is represented by as many as thirty-one specimens (four from Phase A of Period I, one each from Phase B of Period I and the rampart-filling and the rest from Pit 1). Other ordinary shapes are: spherical, five (two from the rampart-filling and the rest from Pit 1); short oblate circular, two (both from Pit 1); oblate elliptical, two (one each from Phase A of Period I and Pit 1); short truncated bicone circular, three (all from Pit 1); and long barrel circular, two (both from Pit 1). Of the remaining five beads, all grooved, three (two from Phase B of Period I and one from Pit 1) are long inconspicuously barrel circular; all of them are spirally grooved clockwise (pl. XLIV, 20). The fourth (from Phase A of Period I) is short truncated convex circular, grooved horizontally and resembles an *āmalaka* (pl. XLIV, 21), while the fifth (from the rampart-filling) is short cylindrical circular with a central groove (pl. XLIV, 19), the whole reminiscent of the vertebra. Most of the bone beads are chiselled with fine finish and a few have a black surface.

Of the excavated glass beads, black opaque accounts for thirty-one: shellac-red opaque, five; green, twelve; bluish green, four; greenish blue, two; greyish blue, two; light blue, six; traffic blue, one; French blue, two; azure blue, one; and orange opaque, one. Among the black opaque beads, thirteen (two from the surface, three from Pit 1 and eight from the rampart-filling) bear white threads and four (one from layer 2 and the rest from the rampart-filling) alternating red and white threads (pl. XLIV, 18). A microscopic examination of the small pieces of two of these beads shows that the seemingly black is actually deep green to transmitted light. The white and red threads do not penetrate deep into the matrix. The threads are usually arranged in clockwise spirals, the latter with one, one and a half or two turns (pl. XLIV, 17), while in a few the threads are in roughly inverted S-shaped curl with ends near the hole-ends (pl. XLIV, 16). The number of threads is four in the case of the beads with red and white threads and is three in the case of beads with white threads with the exception of one which has four. The shape of these beads shows little variation, being either spheroid or ellipsoid circular. Six beads (all from the rampart-filling) have longitudinal stripes in red. In some cases the stripes are irregularly spaced and in two beads the stripes occur also on the inner face of the hole. The red colour is flush with the black. Two of these beads are fragmentary, and here the red colour is seen not penetrating deep into the matrix. Two beads are spheroid (pl. XLIV, 15), one is standard

cylindrical circular and three are short oblate circular (pl. XLIV, 14). One of the beads of the last group has the four stripes on a half of the surface, the other half having a circular depression which might have held coloured glass other than black for acting as an eye. The range of shapes of the remaining ten beads, all plain, is limited to spheroid (three, one from Phase B of Period I and two from the rampart-filling), ellipsoidal circular (six, three from Pit 1, two from the rampart-filling and one from layer 2) and short oblate circular with a large perforation (one, from the rampart-filling).

Of the opaque shellac-red glass beads, two (one from Pit 1 and the other from the rampart-filling) are standard cylindrical circular, one being tiny (pl. XLV, 59), one (from Pit 1) standard truncated convex circular, one (from the rampart-filling) ill-faceted and the fifth (from the rampart-filling) cornerless cube with four diamond-shaped facets round the perimeter and four facets in the form of the segment of a diamond (instead of triangular) round each hole-end.

Of the green glass beads, one (from the rampart-filling) is in pieces. Seven (one each from Phase B of Period I and layer 2, two from Pit 1 and three from the rampart-filling), all translucent, are spheroid, but unbored, two (both translucent, but one with black patches, from the rampart-filling) short truncated bicone circular (one with two whitish radial lines (pl. XLV, 53) and one (from Pit 1), translucent, long barrel circular. The remaining one (from Pit 1), nearly transparent, is a fine curved pendant (pl. XLIV, 30) representing perhaps the animal-claw or -tooth.

Among the bluish-green glass beads, one (from Phase A of Period I) is short oblate circular, the second (from Phase B of Period I) standard bicone circular, the third (from the rampart-filling) long inconspicuously barrel hexagonal, and the fourth (from Pit 1) conical bottom portion of a pendant with square cross-section. The third bead is almost transparent and others are translucent.

Of the two greenish-blue glass beads, both translucent, one (from Pit 1) is a tiny spherical bead and the other (from layer 2) oblate circular.

The two greyish-blue glass beads (both from the rampart-filling, one fragmentary), both translucent, are oblate circular with red longitudinal stripes, three on the intact specimen and two preserved on the fragmentary. The red, which is flush with blue, does not penetrate deep into the matrix.

Out of the six bright light-blue (like pastel-blue) glass beads, all translucent, one (from Pit 1) is absolutely in tiny particles, the second (from the rampart-filling) a small fragment, the third (from the rampart-filling) short oblate circular, and the remaining three (all from the rampart-filling) spheroid; one of the spheroid beads has on its surface a circular depression which might have contained a patch of other colour.

The traffic-blue glass bead (from the rampart-filling), translucent, is spheroid. The same colour is represented by a surface find which is short oblate circular.

Of the two glass specimens of French blue colour, both translucent, one (from Pit 1) is standard cylindrical circular and the other (from Phase A of Period I) is

spherical and unbored. From the surface is collected a portion of a long cylindrical square bead (pl. XLV, 64).

The translucent azure-blue glass bead (from layer 2) is oblate circular.

The orange opaque glass bead (from Pit 1) is oblate disc circular annular (pl. XLV, 41). A similar bead is collected from the surface.

The composition of all the three frit beads seems to be quartz-grains. One (from Phase A of Period I) of them, brownish white, is long ellipsoid circular, the second (from Phase B of Period I), green, spheroid and the third (from Phase A of Period I) also spheroid. The last, an unbored specimen, has a greenish matrix below the whitish surface which has disintegrated considerably.

The most popular form in terracotta is vase-shaped, represented by as many as ninety-seven specimens, excluding three from the surface. The shape varies: twenty-two (three from Phase B of Period I, eleven from Pit 1, one from the surface and the rest from the rampart-filling) have a disc-like rim, a constricted neck and a truncated conical profile (pl. XLVI, 72), fourteen more (two from Phase B of Period I, one each from Pit 1 and layer 2 and the rest from the rampart-filling) having the rim-end concave; four (one from Pit 1 and the rest from the rampart-filling) a disc-like rim and a truncated conical profile without a neck, further four (two from Phase B of Period I and one each from Pit 1 and the rampart-filling) having the rim-end concave (pl. XLVI, 73); six (one each from the surface and layer 2 and four from the rampart-filling) an inconspicuous disc-like rim and a truncated convex profile without neck (pl. XLVI, 75); five (one from Phase A of Period I and the rest from the rampart-filling) a prominent disc-like rim, an inconspicuous neck and truncated convex profile (pl. XLVI, 78), one of these having the rim-end concave; five (one each from Phase A of Period I and the rampart-filling and the rest from Pit 1) a collared rim and a truncated convex profile without neck (pl. XLVI, 76); ten (five from Pit 1, four from the rampart-filling and one from the surface) a collared rim and truncated convex conical profile without a neck, three of these having the rim-end concave (pl. XLVI, 77); three (one each from Phase B of Period I, Pit 1 and the rampart-filling) a collared rim and a truncated conical profile without a neck (pl. XLVI, 74); three (one from Pit 1 and two from the rampart-filling) a disc-like or collared rim and pear-shaped profile (pl. XLVI, 80); one (from layer 2) an inconspicuous featureless rim and a pear-shaped profile (pl. XLVI, 79); three (one from Phase B of Period I and two from Pit 1) a disc-like rim and a globular profile truncated in the middle (pl. XLVI, 81); eight (one from Phase A of Period I, five from Pit 1 and two from the rampart-filling) a collared rim and a prominently-truncated convex or globular squat profile (pl. XLVI, 82); eleven (three from Phase B of Period I, one from Pit 1 and the rest from the rampart-filling) a disc-like rim, a constricted neck and a prominently-truncated conical squat profile, two of these having the rim-end concave (pl. XLVI, 83); and one (from the rampart-filling) a large disc-like rim (end concave), a constricted neck and a prominently-truncated cylindrical profile (pl. XLVI, 84). With the exception of four beads which are grey, all are red, the colour varying from dull-red

to well-burnt brick-red. The fabric is usually fine, though there are some with medium fabric. Most of them were originally treated with a red slip, the colour varying from bright red to blackish red. A few have a black slip. The spherical form is represented by seven beads (one from Phase B of Period I, three from Pit 1 and the rest from the rampart-filling), besides a surface-find, an unusually large dull-red bead with a diameter of 4.5 cm. (probably intended for the animals). All of them are worn-out, medium-grained and dull red, some having smoky patches. None of them preserve any slip, one having a few carelessly incised strokes radiating from hole-ends (pl. XLVI, 88). Nine beads (three from Pit 1, four from the rampart-filling and two from layer 2) are spheroid, some being ill-shaped. Some are dull red with smoky patches and others are completely black. Without any slip extant, they are medium- or coarse-grained, a few having small pieces of quartz in the matrix. Short truncated convex circular is the form of seven beads (one each from the surface and Pit 1 and the rest from the rampart-filling). Five of them are dull red and two black, all medium-grained and one alone preserving scanty traces of a black slip (pl. XLVI, 86). Three beads (all from layer 2) are long barrel circular (pl. XLVI, 87), indifferently fired, medium-grained, slipless and of smoky colour. Two (one from Pit 1 and the other from the rampart-filling) are convex truncated cone disc circular (pl. XLVI, 85). Both are dull red and of medium fabric, one preserving traces of a blackish-red slip. A solitary slipless standard biconical circular bead (pl. XLVI, 90), of smoky colour and medium fabric, was recorded from the section-scraping of the rampart-filling and layers 6 and 7. Standard chamfered cylinder circular (pl. XLVI, 89) is the shape also of a single specimen (from Pit 1). Of medium fabric and dull-red colour with smoky patches, it does not show any slip. There is only one bead (from the rampart-filling) of areca-nut shape (pl. XLVI, 91); with striations, it is black without any slip extant. Short truncated bicone circular is the form of only one bead (from Phase B of Period I), one of its sides being prominently truncated (pl. XLVI, 95). Coarse-grained and of dull-red colour with smoky patches, it does not preserve any slip. An oblate circular bead of black core (from the rampart-filling) is interesting for the greenish glaze on it (pl. XLVI, 92). Faint traces of whitish glaze appear on an oblate circular lug-collared bead (from the rampart-filling) of black core (pl. XLVI, 94). Another oblate circular collared bead (from Phase B of Period I) of dull-red colour is horizontally gadrooned (pl. XLVI, 93). The remaining two beads (one from Phase B of Period I and the other from Pit 1) are mere fragments, both being dull-red and one with red slip.

Of the five beads, the material of which has not been identified definitely, one (from Phase A of Period I) is a fragment of a short barrel circular bead, the second the spheroid etched eye bead (pl. XLIV, 4) already mentioned (p. 125), the third (from the rampart-filling) unbored spherical, the fourth (from Phase B of Period I), a damaged specimen, perhaps long convex circular (It is either obsidian or more probably black cryptocrystalline variety of quartz.) and the fifth (from Pit 1) dagger-shaped pendant (pl. XLIV, 31). The last is a fine specimen with a series of concentric V-shaped incisions

marking the exaggerated bottom end of the hilt. Fairly light and of wooden colour it is neither organic nor wooden. The material of one of the surface-finds also remains unidentified. It is an oblate tabular bead with a solar symbol, made by radiating veins of quartz (?) and a red pellet enclosed by quartz (?) against a black background on both faces (pl. XLV, 39).

The following selected beads are illustrated.

Figs. 25-28; pls. XLIV-XLVI

1. Agate: spherical. Etched with eight dotted concentric circles. From the rampart-filling. (TLK-187.)
2. Agate: spherical. Etched with a dotted spiral. From Pit 1. (TLK-1070.)
3. Carnelian: spherical. Etched with four sets of double convex lines (in dashes) converging at two opposite points of the perimeter and enclosing two dashes within the resultant lenticular compartments. From Pit 1. (TLK-1071.)
4. Indeterminate: spheroid. Etched eye bead with a black band round the perimeter and black circular patch at one end containing the hole. The black design is made on a whitened ground. From Phase B of Period I. (TLK-162.)
5. Agate: spherical. Etched with a wavy band. From Pit 1. (TLK-920.)
6. Carnelian: Standard cylindrical circular. Etched with two zonal bands. From the rampart-filling. (TLK-392.)
7. Carnelian: long cylindrical circular. Etched with three zonal bands. From Pit 1. (TLK-897.)
8. Chalcedony: long cylindrical circular. Four inconspicuous zonal grooves round the body without any trace of colour. From Pit 1. (TLK-1064.)
9. Chalcedony: long inconspicuously convex circular. Etched with six zonal bands. From Pit 1. (TLK-977.)
10. Carnelian: long barrel circular. Etched with six zones, the middle four being dotted. From the rampart-filling. (TLK-164.)
11. Carnelian: long convex ellipsoidal. Etched with three zonal bands, the middle band crossed by a series of small horizontal lines. From Phase B of Period I. (TLK-636.)
12. Agate: long convex elliptical. Etched with ten connected pentagons in two rows and with marginal bands, one each near the end. From the rampart-filling. (TLK-414.)
13. Agate: spherical. Etched with ten connected pentagons in two rows. From the rampart-filling. (TLK-180.)
14. Glass, black opaque: short oblate circular. With four (two in double line) red longitudinal stripes on the surface and two red stripes (one in double line) on the inner face of the hole. From the rampart-filling. (TLK-111.)

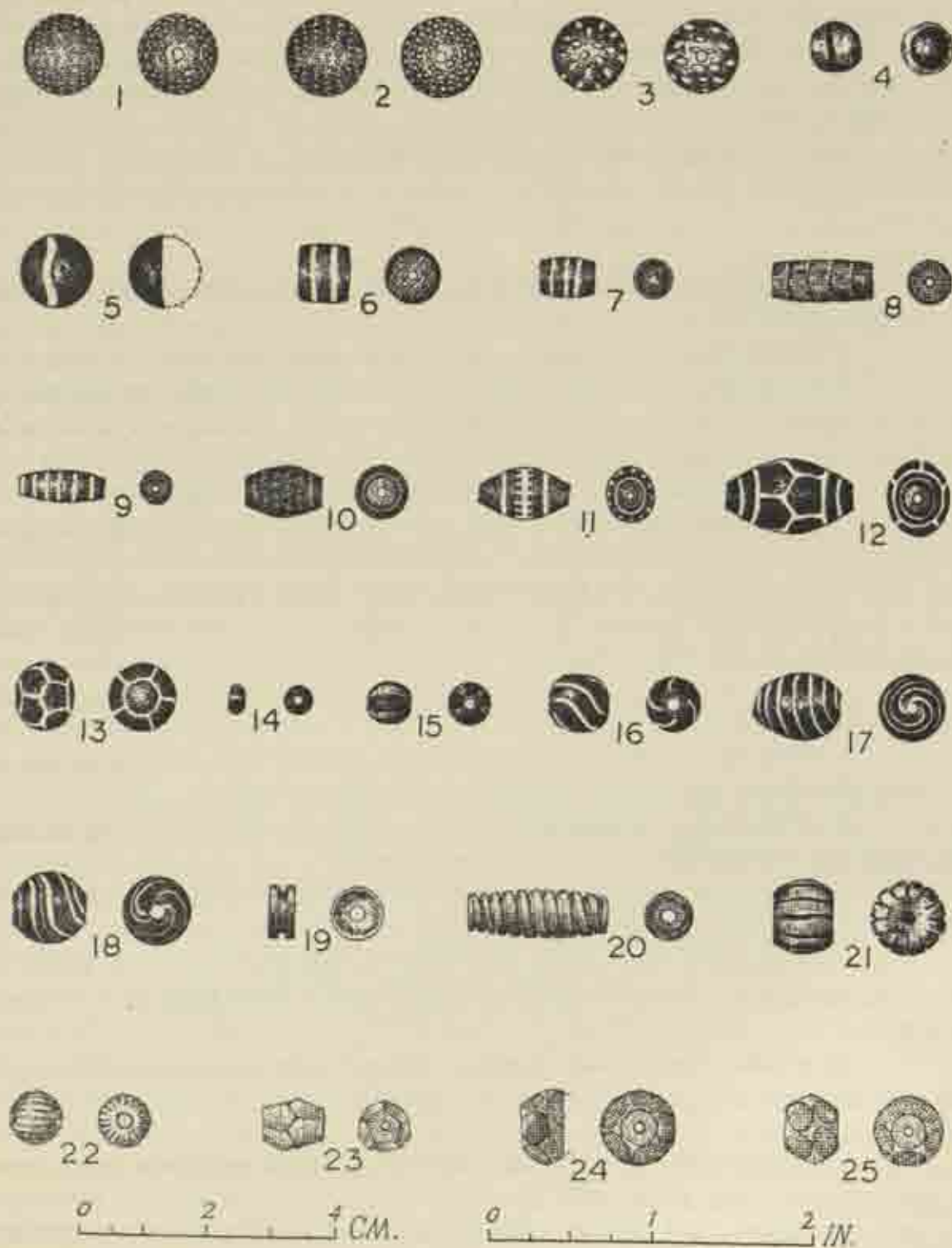


FIG. 25. Tilaura-kot: beads

15. Glass, black opaque: spheroid. With four red longitudinal stripes, irregularly spaced. From the rampart-filling. (TLK-188.)

16. Glass, black opaque: spheroid. With four white threads, in roughly inverted S form, with ends near the hole-ends. From the rampart-filling. (TLK-25.)

17. Glass, black opaque: ellipsoid circular. With three white threads, in clockwise spirals, each with two turns. From Pit 1. (TLK-1092.)

18. Glass, black opaque: ellipsoid circular. With four (two in red and two in white—red alternating with white) clockwise spirals, each making a complete round. From the rampart-filling. (TLK-416.)

19. Bone: short cylinder circular. With a central groove. From the rampart-filling. (TLK-710.)

20. Bone: long inconspicuously barrel circular. Grooved spirally clockwise. From Pit 1. (TLK-1165.)

21. Bone: short truncated convex circular grooved horizontally (*amalaka*-shaped). From Phase A of Period I. (TLK-848.)

22. Silver: spherical ribbed with horizontal grooving. From Pit 1. (TLK-954.)

23. Agate: long truncated bicone pentagonal. Base of a cemented eye bead with two connected rows of five ground elongated U-shaped flats. From Pit 1. (TLK-918.)

24. Agate: short truncated bicone pentagonal (fragment). Cemented eye bead originally with twelve ground circular flats, one of the flats still having a red agate patch cemented on it. From Phase B of Period I. (TLK-337.)

25. Chalcedony: short truncated bicone pentagonal. Base of a cemented eye bead with twelve ground circular flats. From Phase B of Period I. (TLK-784.)

26. Agate: standard double chamfered cylinder octagonal. Base of a cemented eye bead with twenty-four facets. From the rampart-filling. (TLK-183.)

27. Carnelian: disc semicircular spacing bead. From the surface.

28. Rock-crystal: drop-pendant, hexagonal in cross-section. From Pit 1. (TLK-1126.)

29. Rock-crystal: sword-shaped pendant, lenticular in cross-section. From Pit 1. (TLK-980.)

30. Glass, light green: curved pendant, representing tooth or claw of animal, elliptical in cross-section. From Pit 1. (TLK-1133.)

31. Unidentified: dagger-shaped pendant, roughly diamond-shaped in cross-section. From Pit 1. (TLK-1137.)

32. Carnelian: disc triangular spacing bead. From Pit 1. (TLK-926.)

33. Garnet: roughly ellipsoid semicircular resembling a scaraboid. From the rampart-filling. (TLK-95.)

34. Onyx: oblate circular. From layer 2. (TLK-1189.)

35. Agate: standard circular tabular. From the rampart-filling. (TLK-181.)

36. Chalcedony: standard diamond-shaped tabular. From Pit 1. (TLK-978.)

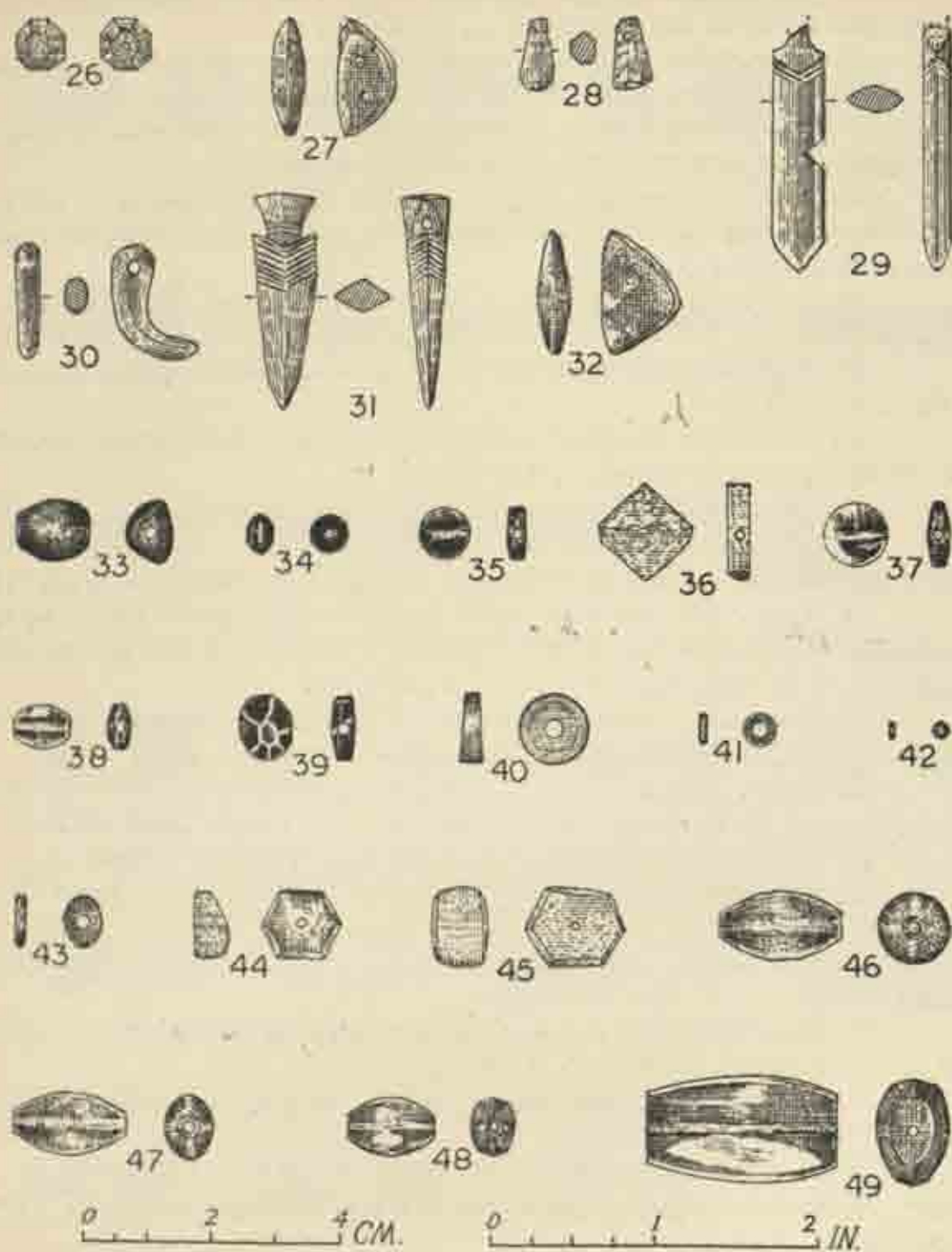


FIG. 26. Tilaura-kot: beads

37. Rock-crystal: standard circular lenticular. From layer 2. (TLK-969.)
38. Rock-crystal: long ellipsoid lenticular. From Pit 1. (TLK-919.)
39. Unidentified: oblate tabular. The central red pellet, within a white border, with radiating veins of quartz (?) on black surfaces makes the solar symbol. From the surface.
40. Shell: cylinder disc circular. From Pit 1. (TLK-955.)
41. Glass, orange opaque: oblate disc circular annular. From Pit 1. (TLK-922.)
42. Paste: short cylinder circular. From Pit 1. (TLK-892.)
43. Copper: oblate disc elliptical. From the rampart-filling. (TLK-21.)
44. Rock-crystal: truncated convex (one side short, the other side disc) hexagonal wedge. From Phase B of Period I. (TLK-335.)
45. Rock-crystal: short truncated convex hexagonal. From the rampart-filling. (TLK-244.)
46. Rock-crystal: long convex circular. From the rampart-filling. (TLK-165.)
47. Rock-crystal: long convex elliptical. From the rampart-filling. (TLK-833.)
48. Amethyst: long convex hexagonal. From Phase B of Period I. (TLK-336.)
49. Rock-crystal: long barrel hexagonal. From the rampart-filling. (TLK-708.)
50. Agate: long barrel circular. From Pit 1. (TLK-869.)
51. Agate: long barrel circular. From Phase A of Period I. (TLK-845.)
52. Garnet: long barrel rectangular. From the rampart-filling. (TLK-560.)
53. Glass, green: short truncated bicone circular. From the rampart-filling. (TLK-390.)
54. Rock-crystal: long truncated bicone hexagonal. From the rampart-filling. (TLK-128.)
55. Gneiss: long truncated bicone elliptical. From layer 2. (TLK-10.)
56. Chalcedony: long truncated bicone circular. From the rampart-filling. (TLK-497.)
57. Agate: standard cylinder circular. From the rampart-filling. Unbored. (TLK-98.)
58. Agate: short cylinder circular. From the rampart-filling. (TLK-421.)
59. Glass, shellac-red: standard cylinder circular. From the rampart-filling. (TLK-866.)
60. Agate: long cylinder inconspicuously hexagonal. From the the rampart-filling. (TLK-391.)
61. Agate: standard cylinder rectangular. From Pit 1. (TLK-573.)
62. Garnet: long cylinder hexagonal. From Pit 1. (TLK-974.)
63. Citrine: long cylinder hexagonal. From Pit 1. (TLK-925.)

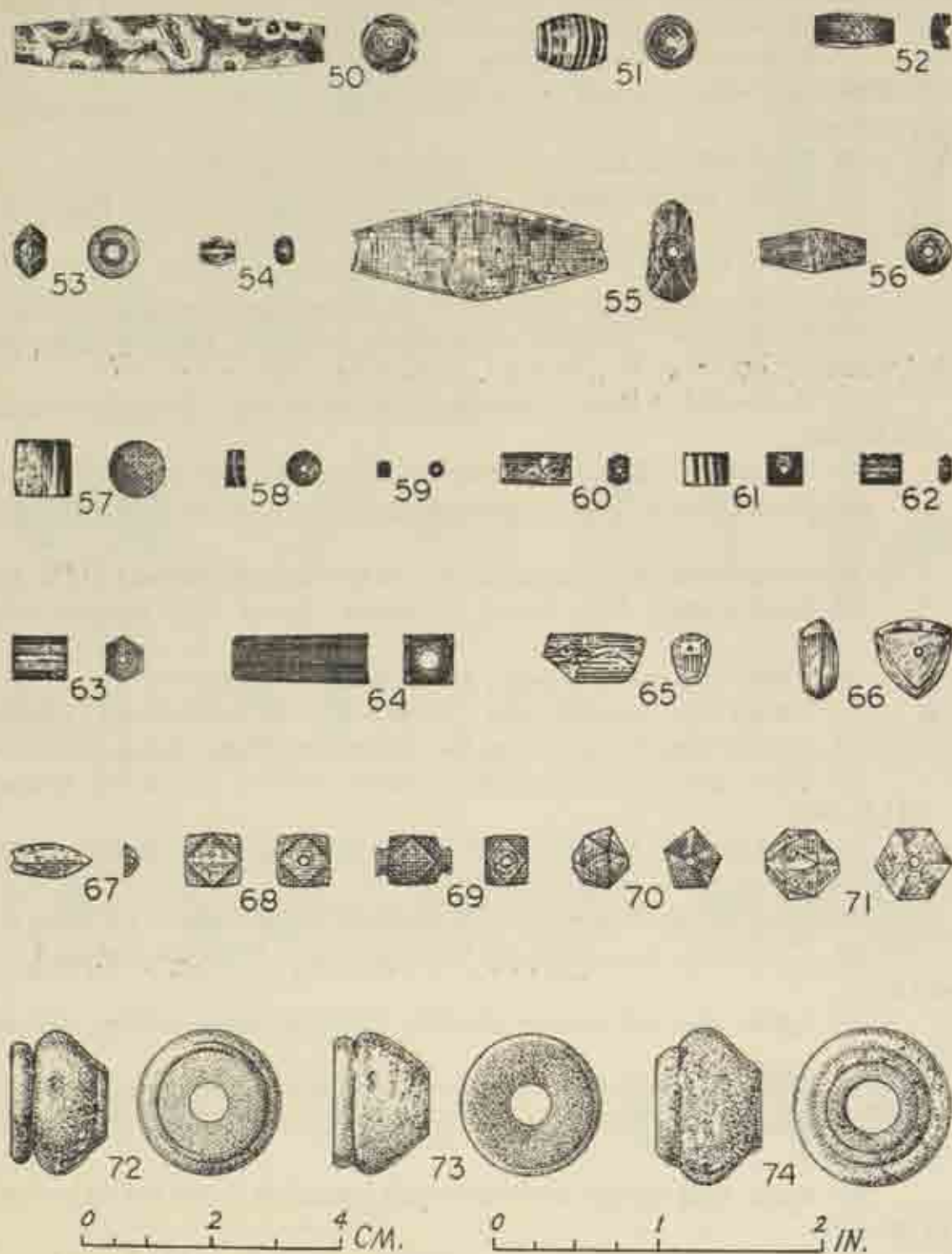


FIG. 27. Tilaura-kot: beads

64. Glass, blue: long cylinder square. Fragment. From the surface.
65. Agate: long leech-shaped elliptical. Fragment. From Pit 1. Unbored. (TLK-973.)
66. Amethyst: short twisted truncated bicone triangular. From the rampart-filling. (TLK-1209.)
67. Amethyst: long leaf-shaped plano-convex.¹ Partly bored. From Phase B of Period I. (TLK-346.)
68. Rock-crystal: cornerless cube. From Phase A of Period I. (TLK-711.)
69. Garnet: cornerless cube lug-collared. From Phase B of Period I. (TLK-37.)
70. Green jasper: faceted standard double pentagon. From Phase B of Period I. (TLK-334.)
71. Rock-crystal: faceted standard double chamfered cylinder double hexagon. From Pit 1. (TLK-923.)
72. Terracotta: vase-shaped with disc-like rim, constricted neck and truncated conical profile. From Pit 1. (TLK-932.)
73. Terracotta: vase-shaped with disc-like rim (end concave) and truncated conical profile and without neck. From Phase B of Period I. (TLK-788.)
74. Terracotta: vase-shaped with collared rim and truncated conical profile and without neck. From Phase B of Period I. (TLK-567.)
75. Terracotta: vase-shaped with inconspicuous disc-like rim and truncated convex profile and without neck. From the rampart-filling. (TLK-791.)
76. Terracotta: vase-shaped with collared rim and truncated convex profile and without neck. From Phase A of Period I. (TLK-372.)
77. Terracotta: vase-shaped with collared rim and truncated convex conical profile and without neck. From Pit 1. (TLK-1081.)
78. Terracotta: vase-shaped with prominent disc-like rim, inconspicuous neck and truncated convex profile. From the rampart-filling. (TLK-17.)
79. Terracotta: vase-shaped with inconspicuous featureless rim and pear-shaped profile. From layer 2. (TLK-3.)
80. Terracotta: vase-shaped with collared rim and pear-shaped profile. From the rampart-filling. (TLK-1210.)
81. Terracotta: vase-shaped with disc-like rim and globular profile truncated in the middle. From Phase B of Period I. (TLK-786.)
82. Terracotta: vase-shaped with collared rim and prominently-truncated globular squat profile. From Pit 1. (TLK-1004.)
83. Terracotta: vase-shaped with disc-like rim (end concave), constricted neck and prominently-truncated conical squat profile. From Pit 1. (TLK-950.)

¹ See p. 128, foot-note 3.

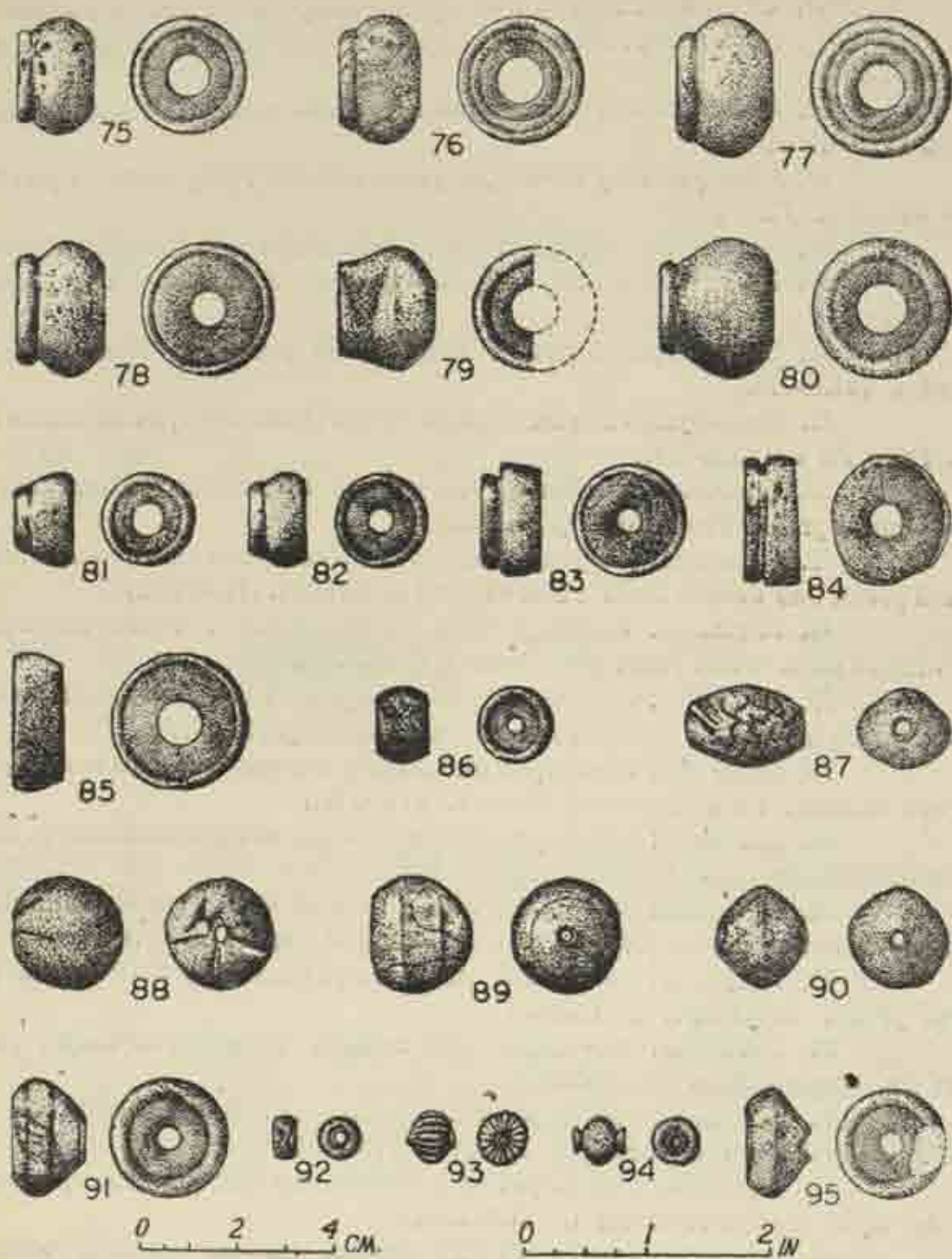


FIG. 28. Tilaura-kot: terracotta beads

84. Terracotta : vase-shaped with large disc-like rim (end concave), constricted neck and prominently-truncated cylindrical profile. From the rampart-filling. (TLK-719.)
85. Terracotta: convex truncated cone disc circular. From Pit 1. (TLK-1057.)
86. Terracotta: short truncated convex circular. From the rampart-filling. (TLK-18.)
87. Terracotta: long barrel circular. From layer 2. (TLK-965.)
88. Terracotta: spherical with incised strokes radiating from hole-ends. From Pit 1. (TLK-1166.)
89. Terracotta: standard chamfered cylinder circular. From Pit 1. (TLK-1080.)
90. Terracotta: standard biconical circular. From the section-scraping of the rampart-filling and layers comprising Phase B of Period I. (TLK-295.)
91. Terracotta: areca-nut-shaped. From the rampart-filling. (TLK-563.)
92. Terracotta: oblate circular with greenish glaze over the core. From the rampart-filling. (TLK-561.)
93. Terracotta: oblate circular collared and gadrooned. From Phase B of Period I. (TLK-126.)
94. Terracotta: oblate circular lug-collared. From the rampart-filling. (TLK-501.)
95. Terracotta: short truncated bicone circular. From Phase B of Period I. (TLK-34.)

F. BANGLES

The material commonly used for bangles is terracotta which accounts for as many as one hundred and seventy-one excluding three from the surface. One (from Pit 1) of these, plano-convex in section, is too small for a bangle and most probably served as a finger-ring. None of these is complete. Made of fine clay, they are usually well-burnt, though a few have a grey core due to indifferent firing. The only decoration, which, evidently, had a mass appeal, consists of a series of oblique incisions (pl. XLVII A, 1-4), on two sides of the outer face. In some cases, usually on one face only, the incised part is so broad that the narrow portion between the incisions stands out in relief (pl. XLVII A, 3). These incisions do not appear to have been made individually, at least in most cases. Some sort of stamp, possibly in the form of a full ring or segment, was used for the purpose, as attested by the sunken area of the design, in some well-preserved fragments, which resulted in raising the top in the form of a rib (pl. XLVII A, 2). The number of such bangles with file-edged sides is one hundred and twelve. Out of these ninety-four (two from Phase A of Period I, twenty-five from Phase B of Period I, twenty-four from

Pit 1, forty-one from the rampart-filling and two from layer 2) are plano-convex (pl. XLVII A, 1-3), though in some cases the stamping has affected the form considerably, as a result of which some are plano-conical, a few nearly triangular and some with sides inconspicuously concave (pl. XLVII A, 2). The remaining eighteen (five from Phase B of Period I, one from Pit 1 and twelve from the rampart-filling) are circular in section (pl. XLVII A, 4). Twenty-eight specimens (two each from Phase B of Period I and Pit 1 and the rest from the rampart-filling) are plain plano-convex. As most of them are badly worn out, one is not sure of the file-edged decoration which several of them might have borne originally. Further twenty-eight (one each from Phase B of Period I and layer 2 and the rest from the rampart-filling) are plain and of circular section (pl. XLVII A, 6). The remaining two (one from Phase A of Period I and the other from Pit 1) are also plain but with the outer face bevelled to sides and of triangular section (pl. XLVII A, 5).

Bangles of other materials are relatively very few. The number of bone bangles is only seven, all fragments. All of them are plain band-like, three (two from Phase A of Period I and one from Pit 1), 1.1 cm., .85 cm. and .9 cm. wide, with oblong section (pl. XLVII A, 7), one (from Pit 1), .72 cm. wide, with oblate section, one (from Pit 1), .85 cm. wide, with one of the inner edges slightly bevelled but otherwise of oblong section (pl. XLVII A, 8), one (from Phase A of Period I), .5 cm. wide, roughly oblong with the central part of the top surface inconspicuously ridged by mild chamfering of the adjoining surface (pl. XLVII A, 9) and the last (from Phase A of Period I), .45 cm. wide, with outer face bevelled to sides and triangular section (pl. XLVII A, 10). All the fragments are well-finished and polished, some having dark-brown colour.

Shell is the material for a single fragmentary specimen (from Pit 1). It is in the form of a broad band with a narrow projecting flange on either edge of the outer face (pl. XLVII A, 12), the overall width being 2.1 cm. The depression between the flanges might have been intended for metal-plating.

Chalcedony and agate, both white, are represented by five fragmentary specimens (one from Phase B of Period I, one from the section-scraping of layers comprising Phases A and B of Period I and three from Pit 1). Three of these have incipient parallel bandings and one a fine circular band in chocolate colour. Remarkable for excellent polish, all of them are plain and oblong in section (pl. XLVII A, 11), their widths being 1.1 cm., .75 cm., .65 cm., .64 cm. and .5 cm.

There are pieces of only six bangles of glass, of which two are tiny pieces in bluish green; the one from Pit 1 is plano-convex, while the second from Phase A of Period I is a fragmentary bit which might as well have formed part of objects other than bangles. The third specimen (from the rampart-filling), translucent and of greenish blue, is irregularly shaped, the section being oblong at some parts and plano-convex at others (pl. XLVII A, 13). The remaining three are black opaque. Two of these (one from layer 2 and the other from layer 1) are plano-convex, while the third (from layer 1) broad band-like (1.1 cm. wide) with the central part of the top surface concave and the corresponding

bottom convex (pl. XLVII A, 14). From the surface came only one fragment, plano-convex in section and of indigo-blue colour.

The following are selected for illustration.

Pl. XLVII A

1. Fragment of a terracotta bangle with file-edged sides, plano-convex in section. From Phase B of Period I. (TLK-348.)
2. Fragment of a terracotta bangle with file-edged sides and ribbed top, plano-convex in section with sides inconspicuously concave. From Phase B of Period I. (TLK-327.)
3. Fragment of a terracotta bangle with one side file-edged and the other with rays in relief, plano-convex in section. From Pit 1. (TLK-612.)
4. Fragment of a terracotta bangle with file-edged sides, circular in section. From Phase B of Period I. (TLK-171.)
5. Fragment of a terracotta bangle with outer face bevelled to sides, triangular in section. From Phase A of Period I. (TLK-347.)
6. Fragment of a terracotta bangle, circular in section. From the rampart-filling. (TLK-30.)
7. Fragment of a bone band-like bangle, oblong in section. From Phase A of Period I. (TLK-856.)
8. Fragment of a bone bangle, oblong in section, but one of the inner edges mildly bevelled. From Pit 1. (TLK-942 and 1191.)
9. Fragment of a bone bangle, roughly oblong in section. From Phase A of Period I. (TLK-857.)
10. Fragment of a bone bangle with outer face bevelled to sides, triangular in section. From Phase A of Period I. (TLK-855.)
11. Fragment of an agate bangle, oblong in section. From Pit 1. (TLK-910.)
12. Fragment of a flanged bracelet of shell. From Pit 1. (TLK-1179.)
13. Fragment of an irregularly-shaped bangle of translucent greenish-blue glass. From the rampart-filling. (TLK-260.)
14. Fragment of a bracelet of black opaque glass with the top surface concave and bottom convex. From layer 1. (TLK-828.)

G. METAL OBJECTS

(i) *Gold*

The gold objects number only five, of which one (from the rampart-filling) is a tiny bit of a leaf and two (both from Phase B of Period I), very thin, were most

probably used for a covering, into which some other objects were fitted. The remaining two are of outstanding interest. One (from Phase B of Period I) serves as a coating for a shell (*Oliva irisans*?) which might have been used as an amulet (pl. XLVII B, 2; the sinister one is shell and the dexter one its gold covering). The extant length of the shell is 1.3 cm. The other (from Pit 1) is a fine wire passing through the perforation of a tiny cup-shaped eight-petalled flower,¹ in amethyst, of excellent colour and superb finish (pl. XLVII B, 1). The top of the flower is concave, the bottom side being truncated conical. The wire appears to have been fashioned by a flattish band entwined cablewise. The specimen presumably served as a ring for the ear or nose.

(ii) Silver

Silver is represented by a single specimen which is a bead described above (p. 128; fig. 25, 22; pl. XLIV, 22).

(iii) Copper

The number of copper objects is forty-seven, of which one is a bead (p. 129; fig. 26, 43; pl. XLV, 43).

Six are rings. Three of these are fairly well-preserved: one (from Phase A of Period I) of round section is open on one side (pl. XLVIII, 1), so that it could be enlarged when slipping it on round the finger; the other two (one each from layers 1 and 2), also intended for finger, are oblong in section, one being distinguished by oblique incisions extant round one edge (pl. XLVIII, 2). Of the remaining three, one (from Phase B of Period I) is a badly worn thin fragment. The other two (one from Phase B of Period I and the other from Pit 1) have each a flattened head (pl. XLVIII, 3). Both of them are so worn that the entire portion excepting the flattened part has become thin like a wire with an opening, raising a doubt about their use as a finger-ring or a ring for the ear or nose.

A small lenticular cast piece (from Phase B of Period I) is remarkable for the relief of a symbol resembling an elongated taurine or the Brāhmī letter *ma* (pl. XLVIII, 4); the breakage at one of the pointed ends is suggestive of its forming a part of some other object (hair-pin?). Another curious object is a small thin piece (from the top of Phase B of Period I) with three prongs on two opposite sides as in a *vajra* (pl. XLVIII, 5).

Eight (one each from Phase B of Period I, Pit 1 and layer 2 and the rest from the rampart-filling) are rods of round section, mostly fragments and one thin like a wire. Most of them are antimony-rods. The best-preserved one (from the rampart-filling),

¹ Similar flowers in semiprecious stones were found inside the reliquaries recovered from the well-known *śūpa* of Piprahwa (District Basti).

a complete specimen, is 12.4 cm. long with both ends thickened (pl. XLVIII, 6). A second specimen (from the rampart-filling) with one end thickened (pl. XLVIII, 7) is curved possibly in course of use. Both the ends of a third specimen (from the rampart-filling), also curved, are pointed (pl. XLVIII, 8).

Two of the fragments might have been bangle-pieces. One (from layer 1) of them is an irregularly-curved broad flat band, oblong in section (pl. XLVIII, 10). The other (from Phase A of Period I) is made of three wire-like strands twisted cablewise (pl. XLVIII, 11). A piece (from Pit 1) of a spirally-rolled (around a central hole) thick wire is too tiny to be identified correctly. A curved wire (from Phase B of Period I), round in section but with one end flattened, looks like a fish-hook (pl. XLVIII, 9). Whether it was barbed or unbarbed cannot be definitely said due to the damaged bottom end. It may be noted that the fisheries of the Banganga are fairly rich at present. Of indeterminate use is a flattish curved rod-like fragment (from Phase B of Period I) which possibly formed part of some other object.

The remaining copper objects (five from Phase B of Period I, nine from the rampart-filling and eleven from Pit 1) are mere shapeless fragments. Noteworthy amongst them are three specimens (one from Phase B of Period I and two from the rampart-filling) with copper pins as rivets. One of these has rivetted to it an ovalish attachment, also of copper (pl. XLVIII, 13). It has one more rivet attached to it and a perforation for another. A few of the fragments might have been parts of vessels.

(iv) *Bronze*

The number of bronze objects is only three. One (from Pit 1) is a vase, of which the splayed-out featureless rim and a portion of the neck are extant (pl. XLVIII, 14). Traces of a rivetted object below the edge of the rim are indicative of a contrivance for suspension. Along with this are found several flat pieces. In case they formed part of this very vase, the latter had a flat base. The second (from Pit 1) is the fragment of a small shallow bowl with a featureless rim and sloping sides sharply carinated to a convex base (pl. XLVIII, 12). The third (from the rampart-filling) is a piece of wire of round section with a curve like that of a large bangle.

The following specimens of copper and bronze objects are illustrated.

Fig. 29; pl. XLVIII

1. Copper ring, circular in section, open on one side. From Phase A of Period I. (TLK-664.)
2. Copper ring, oblong in section, with oblique incisions round one edge. From layer 2. (TLK-749.)

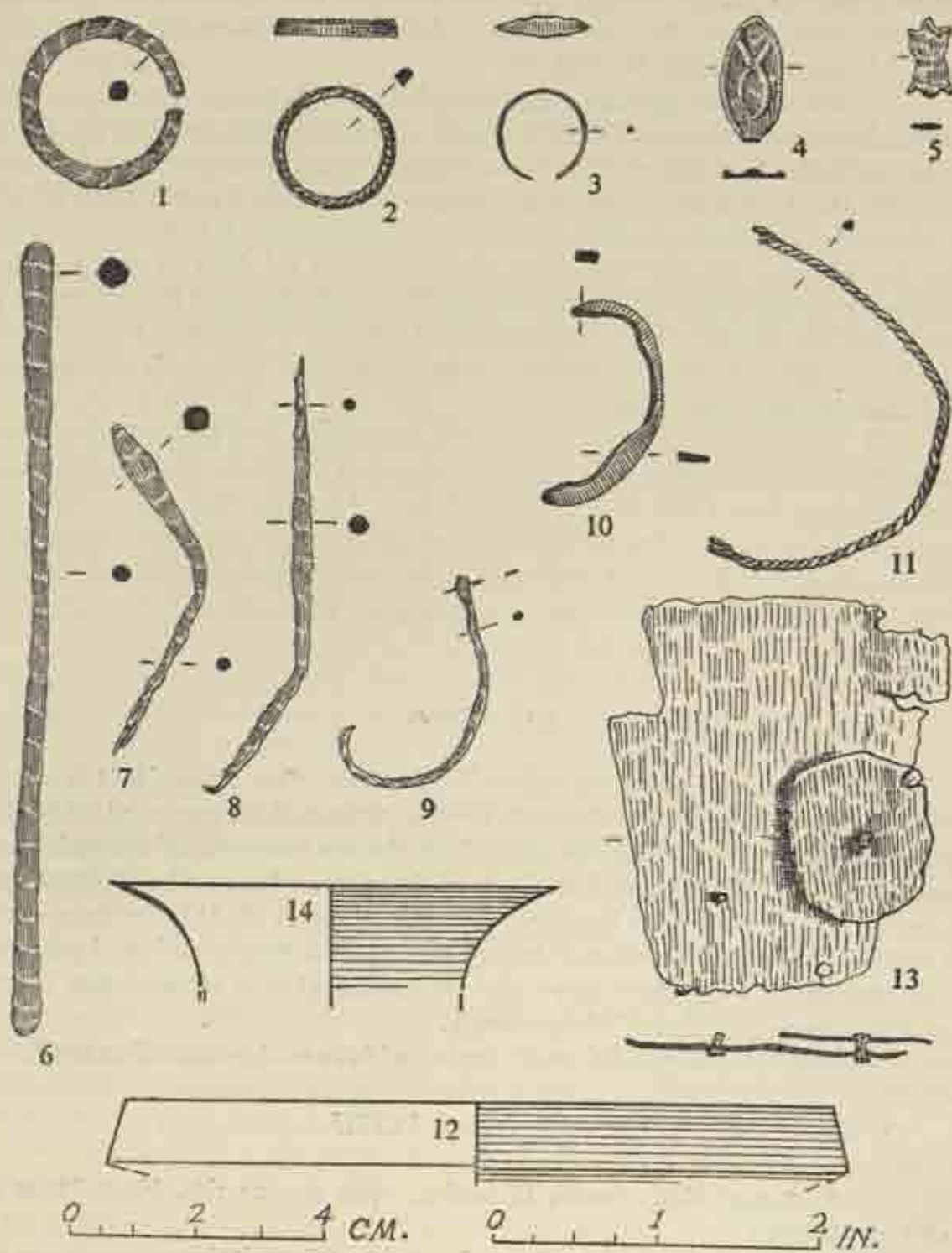


FIG. 29. Tilaura-kot: miscellaneous copper objects and bronze vessels.

3. Copper ring having a lenticular flattened head. From Phase B of Period I. (TLK-631.)
4. Copper lenticular piece relieved with an elongated taurine symbol. From Phase B of Period I. (TLK-310.)
5. Copper object resembling a *vajra*. From the top of Phase B of Period I. (TLK-776.)
6. Copper antimony-rod, circular in section, with ends thickened. From the rampart-filling. (TLK-513.)
7. Copper antimony rod, circular in section, with one end thickened. From the rampart-filling. (TLK-168.)
8. Copper rod, circular in section, with both ends pointed. From the rampart-filling. (TLK-207.)
9. Copper fish-hook (?). From Phase B of Period I. (TLK-343.)
10. Copper bangle (?), oblong in section. From layer 1. (TLK-830.)
11. Copper bangle (?) with three wires twisted cablewise. From Phase A of Period I. (TLK-150.)
12. Bronze bowl. Fragment. From Pit 1. (TLK-585.)
13. Copper object of indeterminate use with rivets. From the rampart-filling. (TLK-1218.)
14. Bronze vase. Fragment. From Pit 1. (TLK-1184.)

(v) Iron

Iron objects number two hundred and thirteen, of which one hundred and fifty-three (five from Phase A of Period I, fifty-three from Phase B of Period I, thirty-seven from Pit 1, fifty-one from the rampart-filling, six from layer 2 and one from the section-scraping) are nails, two hooks (one from the rampart-filling and the other from layer 1), five chisels (one each from Phase A of Period I, Pit 1 and layer 1 and two from the rampart-filling), two spear-heads (one from Phase A and the other from Phase B of Period I), two arrow-heads (one from Pit 1 and the other from the rampart-filling), one small dagger (?) (from Phase B of Period I), one a long heavy bar with ring-like ends (from the rampart-filling), one link (?) of a chain (from Phase A of Period I) and one fragment of a hollow tubular object (from the rampart-filling). The rest (seven from Phase A of Period I, twenty-two from Phase B of Period I, seven from Pit 1, six from the rampart-filling, one from layer 2 and two from layer 1) are either so much rusted and coated with earth¹ or fragmentary that their exact nature and form are not apparent. Several of them might have been fragments of nails. A few are fragments of flat wide bands. One (from

¹ None of the iron objects have as yet been chemically treated.

Pit 1) appears to have been a part of a borer with round section. A curious-looking fragment (from Phase A of Period I) consists of a disc projecting to one side of a flattened shank, the bottom end of the latter missing (pl. L, 17). Another fragment (from the top level of Phase B of Period I) with an elongated conical shank, pointed at one end and bifurcated at the other, might have been the part of a door-ring (pl. L, 22). A small fragment of an object (from the top level of Phase B of Period I) has a nail attached to it (pl. L, 24).

The large number of nails indicates copious wooden constructions. These nails are of manifold sizes. The longest specimen (from Phase B of Period I), nearly 2 cm. wide and 1.5 cm. thick immediately below the head, is 16.5 cm. (without the pointed end which is broken). One (from the rampart-filling) of the smallest is 2.4 cm. high, its diameter immediately below the head being .3 cm. Equally varied are their forms. The shanks of the large and medium-sized specimens are mostly oblong (exceptionally squarish or circular) in section, their heads, projecting at all directions to the right angles of the shank, being usually oblong (pl. XLIX, 1), irregularly oblong or oval (pl. XLIX, 2) and rarely squarish or circular. The small nails have generally circular shanks and projected circular or oval heads (pl. XLIX, 7 and 9); some of these are stunted with conical shanks and large heads (pl. XLIX, 10), while others have normal heads and vertical shanks tapering near the point (pl. XLIX, 7). The heads in most cases are flat and very rarely knobbed (pl. XLIX, 6 and 8). Three (all from the rampart-filling) small specimens have tapering shanks, square in section, with a flat square top without any projection (pl. XLIX, 5). The lower portions of many are curved. In some cases this bending (pl. XLIX, 2) is, no doubt, accidental and caused by hammering itself when they were driven into the wood. But the very prominent bending in other cases appears to have been intentional. The modern practice of bending the left-out bottom part of the nail, to ensure firm fixing and immovability, was, evidently, in vogue in ancient days as well. In such cases the bending usually is either at right angles (pl. XLIX, 4) or U-shaped (pl. XLIX, 3); in the former case the bent part is expected to stick fast to the back side of the wood-work; in the latter case the point enters into the plank again.

Both the hooks are small and of circular section with one end flattened (pl. L, 21).

The longest chisel (from the rampart-filling), 13.7 cm. long, is a round bar, tapering gradually from the top downwards to a flattened and splayed single-slope cutting-edge (pl. L, 15). The others are oblongish, the one (10.5 cm. long) from Phase A of Period I being the best preserved (pl. L, 11). The latter, with a smaller width near the top and slightly sloping sides, has a splayed double-slope cutting-edge. Its maximum thickness is near the middle part. The specimen (6.8 cm. long) from Pit 1 is slightly wider near the flat head, the cutting-edge being broken (pl. L, 14). The fourth chisel (from layer 1, 2.2 cm. long), is oblong with a double-slope cutting-edge. The remaining specimen (from the rampart-filling; 6.2 cm. long), with a smaller width near the top and splayed crescentic cutting-edge, is badly corroded.

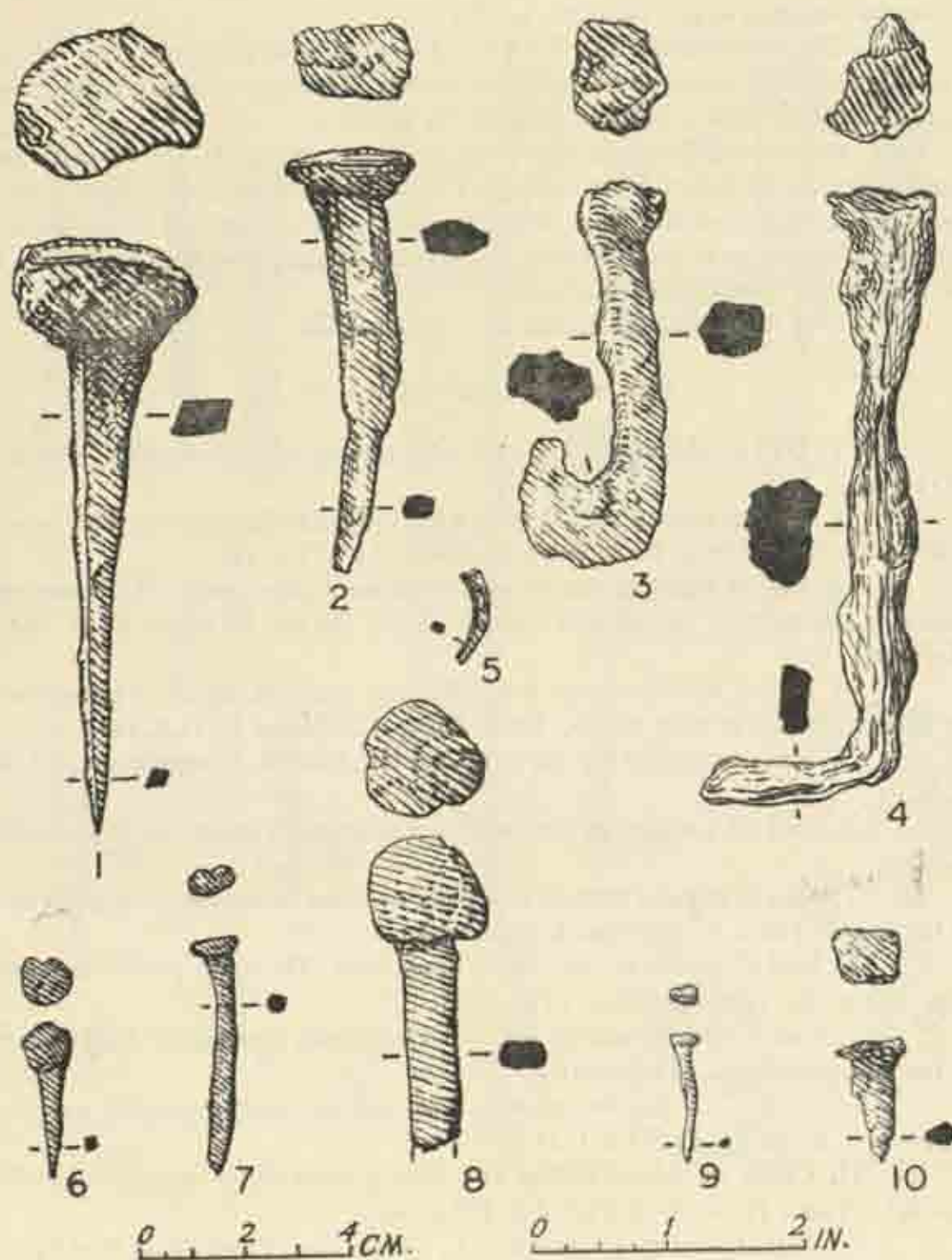


FIG. 30. Tilaura-kot: iron nails

Of the two spear-heads, both with leaf-shaped heads, one is represented by a small fragment of the head alone, while the other with the tip of the head missing, preserves its tang to a large extent (pl. L, 12).

The arrow-head from Pit 1 is leaf-shaped with a double tang (pl. L, 19). The bottom end of the tang and the point are broken. The other is triangular in shape and lenticular in section with a flattened tang (pl. L, 18).

Of unusual type is the heavy rod, 2.7 cm. square at the middle part, resembling a spanner with its semicircular ends (pl. L, 13). Its overall extant length is 30.7 cm. In case the ends were complete rings, which appears to have been very likely, on account of the signs of breakage at the open ends, the specimen might have been a part of a heavy chain for strong animals like elephants.

The illustrated specimens are listed below.

Figs. 30 and 31; pls. XLIX and L

1. Nail of oblong section with a flat oblong head (damaged). From Pit 1. (TLK-1118.)
2. Nail of oblong section with a flat oval head (damaged). The lower portion of the shank is curved. From Phase B of Period I. (TLK-356.)
3. Nail of squarish section with a flat head (damaged). The lower part of the shank is prominently curved like a hook. From the top of Phase B of Period I. (TLK-517.)
4. Nail of oblong section with a flat oval head (damaged). The bottom part of the shank is turned at right angles. From Phase B of Period I. (TLK-144.)
5. Nail of squarish section with a flat top. Curved. From the rampart-filling. (TLK-583.)
6. Nail of circular section with a knob-head. From the rampart-filling. (TLK-628.)
7. Nail of circular section with a flat oval head (damaged). Slightly curved. From the top of Phase B of Period I. (TLK-554.)
8. Nail of oblong section with a knob-head. The lower part of the shank is missing. From the rampart-filling. (TLK-431.)
9. Nail of circular section with a flat oval head (damaged). Slightly curved. From the rampart-filling. (TLK-1007.)
10. Nail of circular section with a flat circular head (damaged) and stunted conical shank. From Pit 1. (TLK-1114.)
11. Chisel of oblong section with sloping sides and a splayed double-slope cutting-edge. From Phase A of Period I. (TLK-661.)
12. Leaf-shaped spear-head with an oblong tang. From Phase B of Period I. (TLK-288.)

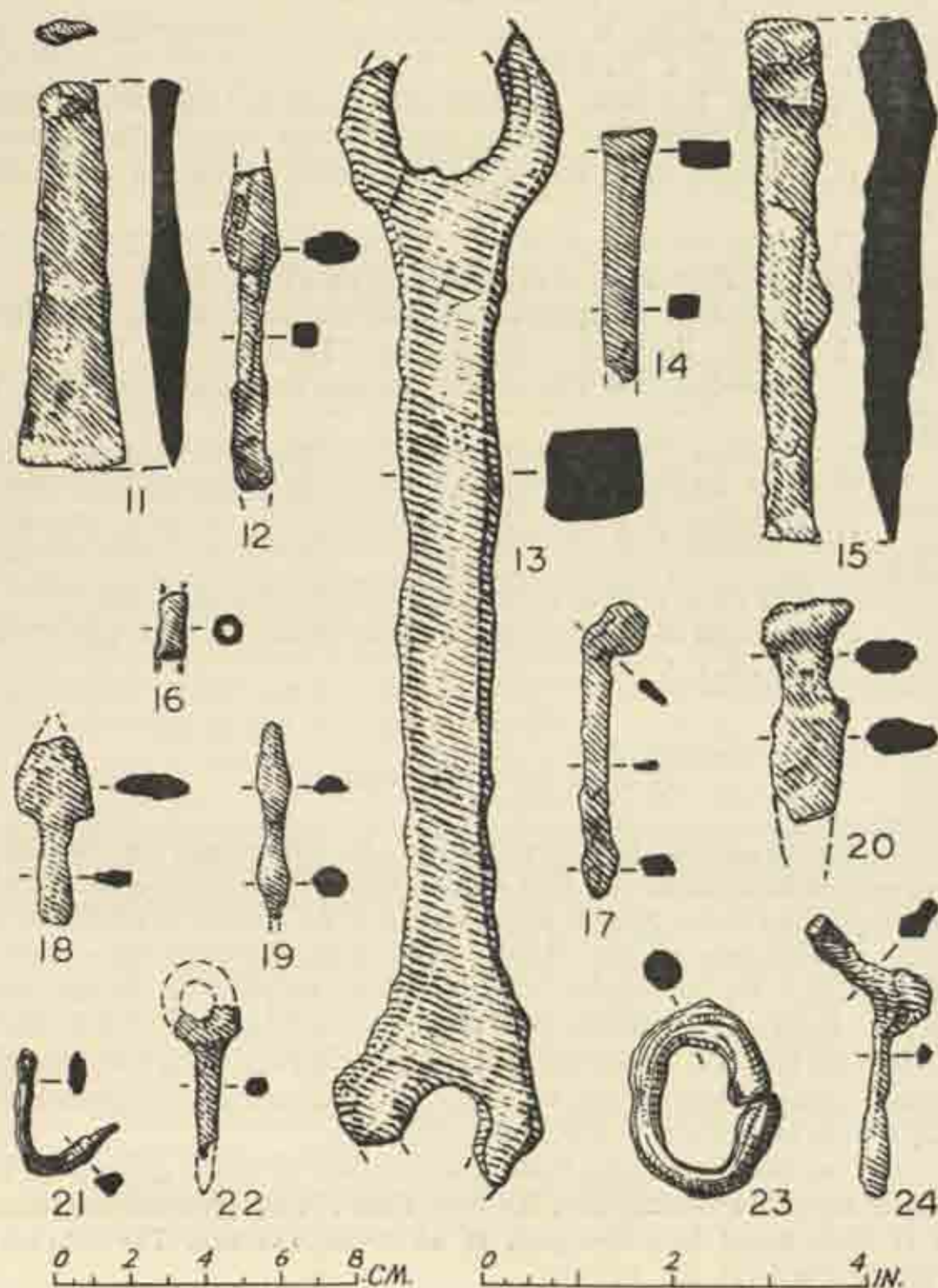


FIG. 31. Tilaura-kot: miscellaneous iron objects

13. Bar, square in section with two ends in the form of an open ring, possibly part of a heavy chain. From the rampart-filling. (TLK-1194.)
14. Chisel, oblong in section, with a slightly-splayed flat head. The cutting-edge is broken. From Pit 1. (TLK-883.)
15. Round bar chisel, inconspicuously tapering and flattened near the bottom, with a splayed single-slope cutting-edge. From the rampart-filling. (TLK-589.)
16. Fragment of a hollow tubular object. From the rampart-filling. (TLK-586.)
17. Indeterminate fragment with a flattened shank and a disc projecting to one side of the shank. From Phase A of Period I. (TLK-834.)
18. Arrow-head, triangular in shape and lenticular in section with a flattened tang. The tip is broken. From the rampart-filling. (TLK-552.)
19. Arrow-head, leaf-shaped with a double tang. The tip is broken. From Pit 1. (TLK-1116.)
20. Fragment of a small dagger (?). From Phase B of Period I. (TLK-51.)
21. Hook with one end flattened. From the rampart-filling. (TLK-545.)
22. Fragment of a door-ring (?). From the top of Phase B of Period I. (TLK-271.)
23. Link (?) of a chain. From Phase A of Period I. (TLK-835.)
24. Fragment of an indeterminate nailed object. From the top of Phase B of Period I. (TLK-135.)

H. BONE AND IVORY OBJECTS

Leaving aside the beads (pp. 129 and 135) and bangles (pp. 142 and 143), there are twenty-three miscellaneous bone objects. Most of them are fragmentary so that a correct identification is not possible in a few cases in the absence of both ends.

Four of these are arrow-heads. They fall into three varieties: (i) with both ends pointed without any appreciable difference between the point and the tang, both the tang and point being roughly circular in section (two, one from Phase B of Period I and the other from Pit 1; pl. LI, 1); (ii) with elongated conical point and a fairly well-defined tapering tang, circular in section (one, from Pit 1; pl. LI, 2); and (iii) with a trilateral point (one, tang broken from Phase B of Period I; pl. LI, 3).

Five (one each from Phase A and Phase B of Period I, one from layer 2 and two from the rampart-filling) look like styli. Four of these are small fragments, and two out of these might have been parts of arrow-heads as well. The butts are both circular and flattened (pl. LI, 4).

Two (one from Phase B of Period I and the other from Pit 1) are cap-like sockets with a circular section and vertical sides, the unperforated end being conical

(pl. LI, 9). Their lengths are 3.98 cm. and 2.51 cm. They were, evidently, intended for securing the pointed end of such objects like styli.

There are fragments of five antimony-rods (one each from Pit 1 and the rampart-filling and the rest from Phase B of Period I), circular in section. None of them preserve both the ends. One of the ends of two well-finished specimens is slightly conical (pl. LI, 6), while that of a third is pointed. The longest fragment is 9.20 cm.; with top missing, it is inconspicuously tapering with a flat bottom (pl. LI, 5).

Of uncertain use is a roughly-finished rod-like fragment (from Phase B of Period I), oblong or squarish in section.

Of special interest is the fragment of a circular rod tipped with a disc (from Phase B of Period I). It was presumably used for putting a mark on forehead (pl. LI, 7).

Two tabular blocks (one from Phase A of Period I and the other from Pit 1) have a circular perforation. But they cannot be regarded as beads, as the face bearing the incised lines will be covered in case they are used as beads. The squarish one (pl. LI, 13) has two diagonals crossing each other with the perforation at the junction and a third line touching one of the ends of the diagonals. The oblong one (pl. LI, 12) has two parallel incised lines, one above and the other below the perforation on one of its broad faces. This face and also three narrow faces are finished. The partly-finished rear face is concave in the middle, while the fourth narrow face is in two planes, the recessed part finished and the projected part rough due to breakage.

Two fragments of a disc, 8.66 cm. in diameter, were found in Pit 1. Its top surface is slightly concave and is distinguished by broad indentations, resembling in form finger-tip decoration, around the edge (pl. LI, 10).

Also represented by a single fragmentary specimen is a long cylindrical object of indeterminate use (from Phase B of Period I), squarish in section. The extant short face and two of the longer faces are combed with six groovings (pl. LI, 14). The short face is slightly convex and might have been intended for incising concentric lines on wheel-turned or lathe-turned objects.

The remaining object (from Pit 1) is the fragment of a small ball (pl. LI, 11).

The number of ivory objects is seven, of which six (one each from Phase B of Period I and layer 2 and the rest from the rampart-filling) appear to have been fragments of styli. The remaining one (from the rampart-filling) is curved like the tusk of an elephant (pl. LI, 8).

The bone and ivory surface-finds number twenty-one, all of which are small bits of either styli or arrow-heads.

The illustrated specimens are listed below.

Pl. LI

1. Bone: arrow-head. From Pit 1. (TLK-1106.)
2. Bone: arrow-head. Fragment. From Pit 1. (TLK-605.)

3. Bone: arrow-head. Fragment. From Phase B of Period I. (TLK-142.)
4. Bone: stylus. Tip broken. From Phase A of Period I. (TLK-373.)
5. Bone: antimony-rod with a circular section and a flat bottom. Fragment. From Phase B of Period I. (TLK-301.)
6. Bone: antimony-rod with a conical top. Fragment. From Phase B of Period I. (TLK-64.)
7. Bone: Disc-tipped circular rod (pigment-stick?). Fragment. From Phase B of Period I. (TLK-61.)
8. Ivory: curved object of indeterminate use. Fragment. From the rampart-filling. (TLK-222.)
9. Bone: socket. From Phase B of Period I. (TLK-290.)
10. Bone: disc. Fragment. From Pit 1. (TLK-913.)
11. Bone: ball. Fragment. From Pit 1. (TLK-584.)
12. Bone: oblong tabular block with a perforation and incised parallel lines. From Phase A of Period I. (TLK-374.)
13. Bone: squarish tabular block with a perforation and three incised lines, two crossing each other. From Pit 1. (TLK-873.)
14. Bone: cylindrical object, with groovings on three sides, squarish in section. From Phase B of Period I. (TLK-304.)

I. GLASS OBJECTS

The number of glass objects, other than beads (p. 129) and bangles (p. 142), is only eight, all fragments. With the exception of a tiny flat piece (from layer 2) of transparent bluish-green glass, all (three each from Pit 1 and the rampart-filling and one from layer 2) are black opaque with a fairly thick section. Five of these, if not all, are definitely pieces of small shallow bowls with almost straight or slightly slanting sides and inconspicuously convex bottom. The diameter of one (pl. XLVII C, 1), with nearly straight sides, which preserves a small part of the base, is 5.7 cm. at the top, its height being 1.8 cm. The tiniest one (pl. XLVII C, 2) of this group has somewhat sloping sides and measures 2.5 cm. in diameter at the top and 1.5 cm. in height.

The following specimens are illustrated.

Pl. XLVII C

1. Shallow bowl with almost straight sides and an inconspicuously-convex base. From the rampart-filling. (TLK-438.)
2. Tiny bowl with somewhat slanting sides and an inconspicuously-convex base. From Pit 1. (TLK-948.)

J. ROOF-TILES

Mostly in Pit 1 and rarely in Phases A and B of Period I and the rampart-filling were encountered terracotta roof-tiles. Unfortunately, from the fragments recovered it has not been possible to find out either the full length or the breadth. The maximum available length and breadth were respectively 22.5 cm. and 16.5 cm., the average thickness being 2 cm.

While some tiles were indifferently baked, others were well-burnt. In the matrix was often used a profuse quantity of husk. The fabric was usually coarse.

The tiles seem to have been oblong. Along one of the edges of the entire length of one side, which was otherwise flat, ran a wide channel. The latter's back side was curved near the edge. Flanking the other longer edge of the back side were deep furrows, usually two, of which the outermost seemed to have run the entire length. These furrows were most probably made by fingers. Near one of the shorter sides in several fragments was found a circular perforation. Evidently, there was a second hole by its side. The other shorter end sloped to a thinner section. This type of tiles was manufactured most probably in the manner mentioned by P. C. Mukherji.¹ The channel was absent in a single fragment, where the concerned edge was raised with a slight slant, the back part of this portion being curved as usual. The exact shape and pattern of this particular specimen, which also contained a hole, could not be determined.

¹ *Op. cit.*, p. 18.

IV. EXCAVATION AT KODAN

1. PREVIOUS EXPLORATIONS AND NOTICES

THE earliest notice of Kodan is by A. Führer. The ruins of Krakucchanda's natal city, says Führer, 'are still existing between the modern villages of Lori-kī-kudān and Goṭihvā, about 2 miles south-west of Taulihvā, and about 8½ miles south-west of the Srinagar or Sirinagar Sāgar, near which stood the southern gate of Kapilavastu. The three stūpas and monasteries mentioned by Fa Hien and Hiuen Tsiang are still visible and Krakucchanda's Nirvāṇa Stūpa, standing in the middle of the village of Goṭihvā, still rises to a height of about eighty feet.'

In 1899 P. C. Mukherji visited the place.¹ 'About a mile east of the village of Gutivā and about 1½ mile west of Taulivā is Lori-Kudān, on the east of which is a row of four ancient mounds, north to south. The northernmost appeared to be a Stupa of solid brick-work, still about 30' high, of which the superficies was covered with plasters, and concrete as is still visible on the top. On three sides of it bricks have been removed long ago by a *Babaji*, who erected his huts here. The next mound, just south of it, is the largest and highest of all the four. It has a compound wall on the four sides, which had been removed some years ago. Ascending about 20 feet, I saw another wall, from which bricks are being removed by the villagers. Going up further, a third wall was traceable on the summit about 40' high from ground level. Here terracotta elephants and horses are dedicated to the spirit of Lori Ahīr, who, the local legend says, was a great giant and used to leap from one mound to the others. On the east of this mound is an ancient tank, full of lotus plants.

'The third mound is a low one, about 250 feet south of the largest one. The walls of a room are traceable here.

'The fourth mound appears to be a structure of solid brick-work, on which a modern temple sacred to Siva has been raised by the villagers. On the south of the temple the line of the ancient platform is clearly visible.

'These mounds are worth excavation, as being very promising of results; and I have reasons to believe that the largest mound will turn out to be the débris of an important monument, most probably a Buddhist monastery.'

¹ A. Führer, *Monograph on Buddha Sakyamuni's Birth-Place in the Nepalese Tarai*, Arch. Surv. North. Ind., VI (Allahabad, 1897), p. 19.

² *Op. cit.*, pp. 32 and 33.

The next notice of this site is by General His Highness Prince Khadga Sumsher Jung Rana Bahadur.¹ Lahari Kudan 'contains three ruined stupas, one of which is remarkably large. These three ruins lie on the sides of a tank, which itself was most probably the site of another ruin, and was excavated by persons in search of treasure trove. The biggest one lies on the west side and is nearly 24 feet high with two divisions—probably site of two *Sanghramas*; the other, nearly 11 feet high, is topped with an octagonal temple, in which there is a phallic linga, called Nageshwara Mahadeo; the third, which is the smallest, is only four feet high, and is in the middle of the other two. In the south-east corner of the tank, three yards off the biggest ruin, lies a piece of small red stone, half immersed in water, which undoubtedly seems to be a piece of the ill-fated Asoka pillar of Gotihawa.

'The place must have derived its name from the *Kudan*, i.e., jumping of Lohora-Laguda, in other words, of Buddha, and it must have been the place where Buddha held athletic sports; if not, the place belonged to his *Gosthis*, i.e., relatives.'

Major W. Vost, conning the descriptions by P. C. Mukherji and Prince Khadga Sumsher Jung Rana Bahadur, identified (i) the northernmost mound with the *stūpa* adjoining the spot where 'the elephant (thrown by Gautama Buddha) falling on the ground caused a deep and wide ditch', (ii) the next mound (the largest) with the remains of the two temples (one with the representation of Gautama and the other with the likeness of Yaśodharā and Rāhula) which Hiuen Tsang saw by the side of the *hastigarta*, (iii) the third one with the site of the school-room of Gautama and (iv) the fourth mound (on which an octagonal temple still stands) with 'the remains of the temple which lay without the south gate (of Kapilavastu), and contained a representation of a sick man'. The tank has tentatively been identified by Vost with the *hastigarta* (pit caused by the fall of the elephant).²

All these presumptions have, however, been proved baseless by the excavation, though, one must admit, the configuration of three of these mounds presented the appearance of *stūpas* covered under the shroud of débris.

2. THE SITE

About 2 km. to the south-west of Taulihawa, nearly 2 km. to the north-east of Gotihawa (p. 228), where there exists *in situ* the lower portion of an Aśokan pillar, and about 1½ km. to the east of the ancient habitation-site of Pipri (p. 208) is a group of four

¹ *The Pioneer*, 6th February 1904, p. 4.

² Major W. Vost, 'Identifications in the Region of Kapilavastu', *Journ. Royal Asiatic Society of Great Britain and Ireland*, 1906, pp. 558 and 559.

mounds at Kodan¹ (lat. 27° 32' N.; long. 83° 2' 30" E.) by the side of the Taulihawa-Shohratgarh road. These mounds (pl. LII) are located on the banks of a large ancient tank (pl. LVI)—two each respectively on the southern and western banks.

3. THE MOUNDS

Of the two mounds on the south bank, the one adjoining the Taulihawa-Shohratgarh road bears on its top an octagonal temple facing west (pl. LIII). The enshrined *liṅga* seems to be older than the temple, the latter hardly two centuries old. The mound itself contains the ruins of a brick temple, as seen from two scrapings. The scraping near the base of its north face revealed a moulded but uncarved facing (pl. LIV), evidently of the platform. The brickwork, in mud mortar, was fine. Immediately by its side but at a higher level near the extant top facing was found a broken *liṅga* (extant height 33 cm.), its lower portion octagonal and upper portion (21 cm. high), with a convex top, circular (pl. LV A). It is made of sandstone of light-yellowish colour with mauvish patches. The second scraping was made near the top of the mound immediately to the south of the modern temple. The partially-exposed wall (pl. LV B), presumably of the temple proper, was both moulded and carved, the carvings being closely analogous to those of Temple I (p. 165). Thus, the exposed top course had a honeycomb pattern, below which and separated by a recess was a cyma carved with petals, each alternating with a group of three leaves. Below this was a torus. Separated from it by a recessed course was again a cyma with petals. Underneath this was a projected band carved with diamonds, each alternating with a circle. The courses below were not exposed. There were also insets relieving the torus and the courses above. One of these insets was alone exposed. It was carved with an ornate vase. The carved brickwork was coated with lime plaster (p. 183, sample no. 1) which was also carved.

To its west-north-west is the second mound, a very low one. It contains the ruins of a brick structure, almost in the last stage of decay.

Located on the west bank of the tank, the third mound (pl. LVI), about 8 m. high, was at once the largest and the highest. On its top was a large tamarind tree, below which was in worship Sāmāi-devī, represented by two semicircular earthen lumps.

The fourth mound (pl. LVII), the northernmost, immediately to the north of the third, was second in dimensions. The bases of these two mounds almost touched each other (pl. LII).

On account of the trees which had grown on the third mound and which were auctioned to a contractor who took two months to remove them, excavation could not be undertaken at the third mound in the beginning. So the trenches were laid first on the fourth mound and extended afterwards to the third, which,

¹ Locally called Kudan or Lohri-Kudan.

consequently, could not be excavated fully for want of time. The excavation (pl. IV, section at A-B of fig. 32) at these two mounds revealed three structures (fig. 32) —two brick temples of considerable dimensions, referred to hereafter as Temple 1 and Temple 2, and a well respectively unearthed in the third mound, the fourth (northernmost) mound and the intervening slope between the two mounds.

4. STRATIGRAPHY

Stratification shows that the well (p. 163) was the earliest to have come into existence and was followed shortly in its wake by Period I of Temple 1 (p. 164), the latter exposed in the third mound. Both these structures seemed to have formed parts of one scheme. The well provided the water necessary for the building of Temple 1, as the tank was yet to come up. Temple 2 (p. 172), the smaller of the two temples and exhumed out of the fourth mound, followed Temple 1 though after a lapse of time. The tank was the offshoot of the constructions of the temples which demanded huge quantity of earth not only for the mortar and bricks, but also for the extensive filling-material (p. 165). This material was invariably yellowish clayey earth having *kankar* nodules—the composition of the top layer of the natural soil here.

When Temple 1 got ruined, a second temple was built on its plinth mostly with the bricks recovered from the debris of the earlier temple.

5. CHRONOLOGY

The dates of the structures are uncertain for lack of the definitely-datable objects like inscriptions. No doubt, fragments of two images have been found, but they are too defaced to be dated accurately. The image of Mahishāsūramardini (p. 164; pl. LXXXVI C), on the basis of the halo, may roughly be ascribed to about the ninth century A.D. But then, one is not sure whether the image belonged to Period I of Temple 1. The decoration of the brickwork of this temple is, no doubt, exuberant, but it is of little use in the absence of firmly-dated temples with similar decoration. Ceramic evidence also could not be utilized profitably for the precise chronology of the site due not only to the absence of the well-stratified sequence but lack of adequate report on analogous sites with parallel pottery.

Period II of Temple 1, which came to be built not only on the plinth of Period I but largely with its material, was destroyed by fire. The charred wood on its passage has been dated to 985 ± 75 A.D. (on the value of 5730 ± 40 years for the half-life of radiocarbon) by the Tata Institute of Fundamental Research, Bombay.¹ If this

¹ D. P. Agrawal, S. Kusumgar and R. P. Sarna, 'Radiocarbon Dates of Archaeological Samples', *Current Science*, 33, no. 2 (January 20, 1964), p. 42.

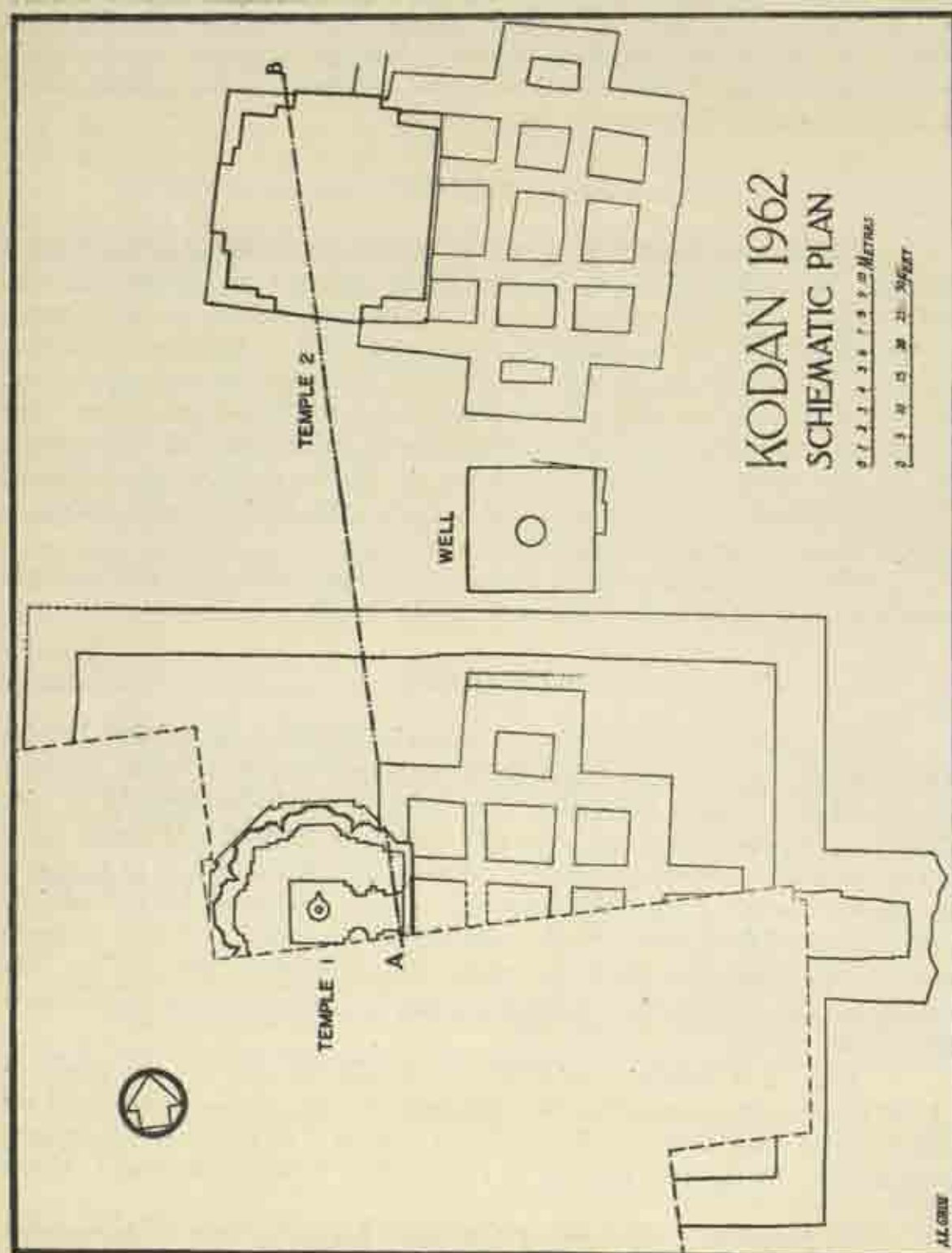
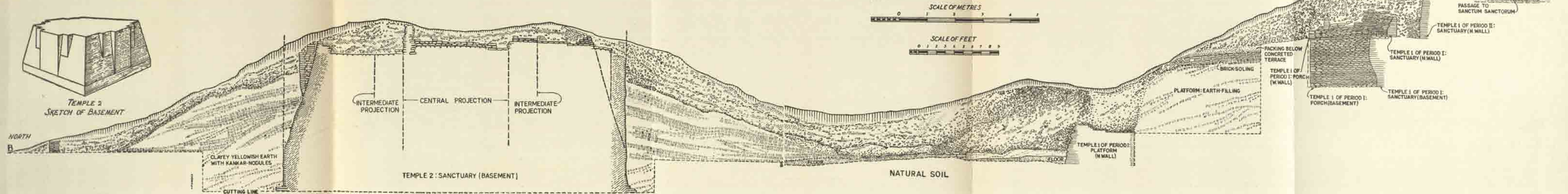
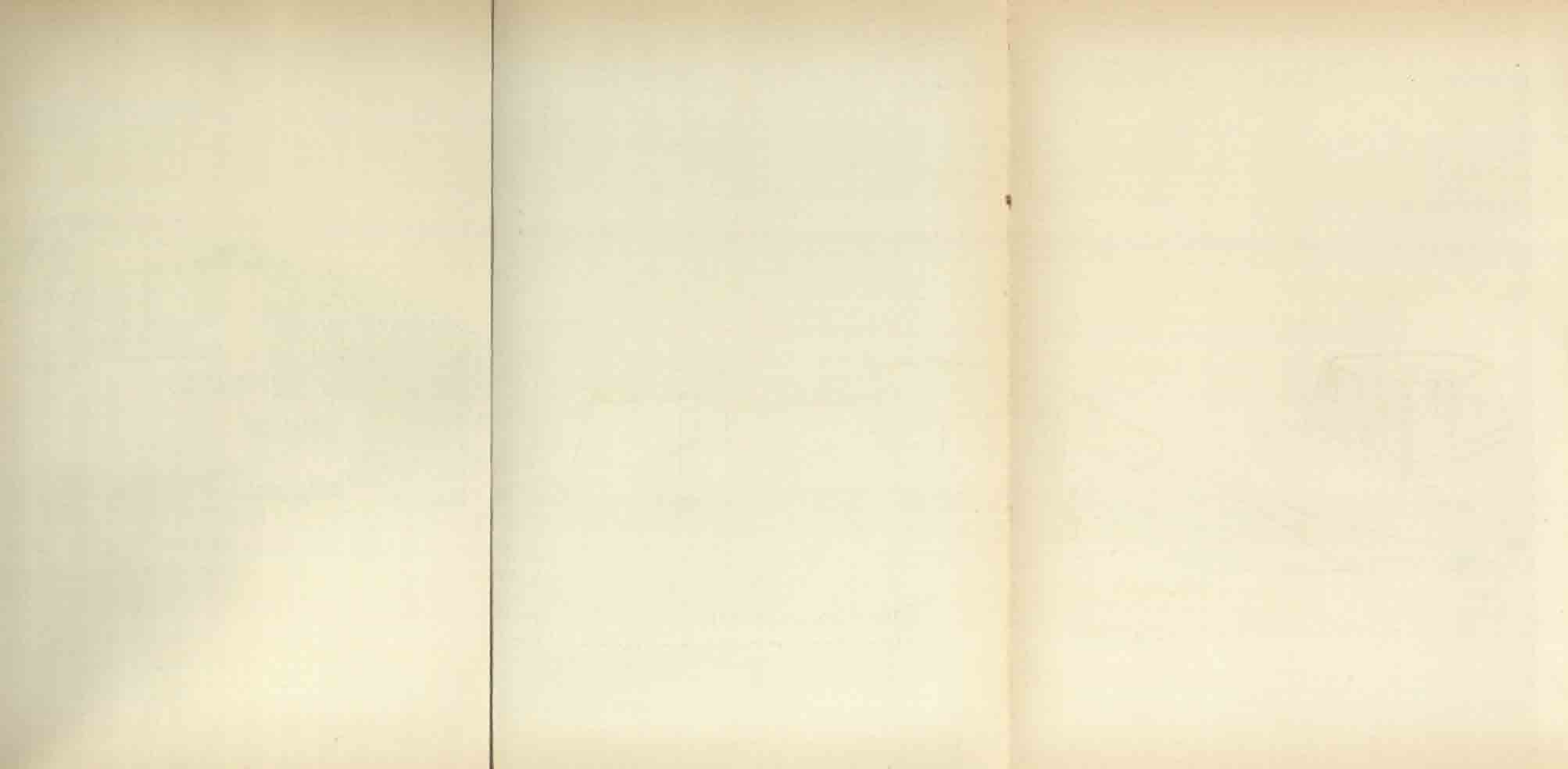


FIG. 32. Kodan 1962: schematic plans of Temples 1 and 2 and the well

KODAN 1962: SECTION ACROSS TEMPLES 1 AND 2





Carbon-14 date is applicable to Period II of Temple I, it is reasonable to infer that Period I of the temple was at least more than a century older.

Period I of Temple I, however, does not appear to have been earlier than the seventh century A. D. The decorated brickwork is closely analogous to that (no longer visible) of the temple of Māyādevī at Lumbini exposed by P. C. Mukherji. Had this temple of Lumbini come into existence in the seventh century A. D. when Hiuen Tsang visited Lumbini and meticulously described its edifices, the pilgrim would not have failed to notice it. From the narrative of Hiuen Tsang it appears that the site of the temple had at that time a decayed *asoka* tree and a few *stūpas*. The construction of the temple must have been subsequent to the visit of Hiuen Tsang.

With such vague data for the lower and upper limits of Period I of Temple I, it is desirable not to speculate on its date but to wait for convincing evidence from some decorated temples of this type.¹

6. GENERAL OBSERVATIONS

From the find of carved bricks at Tilaura-kot, Lamtiya, Chatradi, Bikuli, Sonagarh, Saina-Maina and Lumbini similar to those of Kodan, it is abundantly clear that the period was one of considerable prosperity in which blossomed forth a distinctive and prolific building-art in bricks in this region. Indeed, this period was marked by a vigorous creative vitality.

The temples at Kodan as well as others at places like Tilaura-kot, Chatradi, Bikuli, Sonagarh, Chaganth, Saina-Maina, Siwalwa and Lumbini leave no room for doubt that stone, in spite of its ready availability, was never popular in this region, and clay formed the chief medium not only in artistic expression but in architectural pursuits. In temples, stone played a very negligible part, being employed usually in images, door-frames and gargoyles and rarely in pilasters. The builders, however, were men of no mean skill. Their planning was ambitious and the execution consummate. The minute and effective decoration on the bricks displays their wide aesthetic vision. The remnants, though meagre, are sufficient to bear that the products of these builders, with their rich wealth of decorative ornaments, compared favourably with their fellow-workers in stone. Further, these remains prove undoubtedly that architectural expression in brick was not, as is commonly believed, a forced monopoly of the riparian plains away from hills. The structures in this medium used to be practised on a grand scale in a large part of the country even at the foot of the Himalayas, but being more susceptible to destructive

¹ At Sonagarh (p. 219) were noticed pottery and loose ornamental bricks similar to those of Kodan and a stone image of Chāmūṇḍā (pl. CXXXIX B) which is said to have been salvaged from the ruins of one of the brick temples by the side of the hut enshrining the image. If the pottery, ornamental bricks and the image can be associated together, the date of this particular temple and also of Period I of Temple I of Kodan was not later than the ninth century A.D.

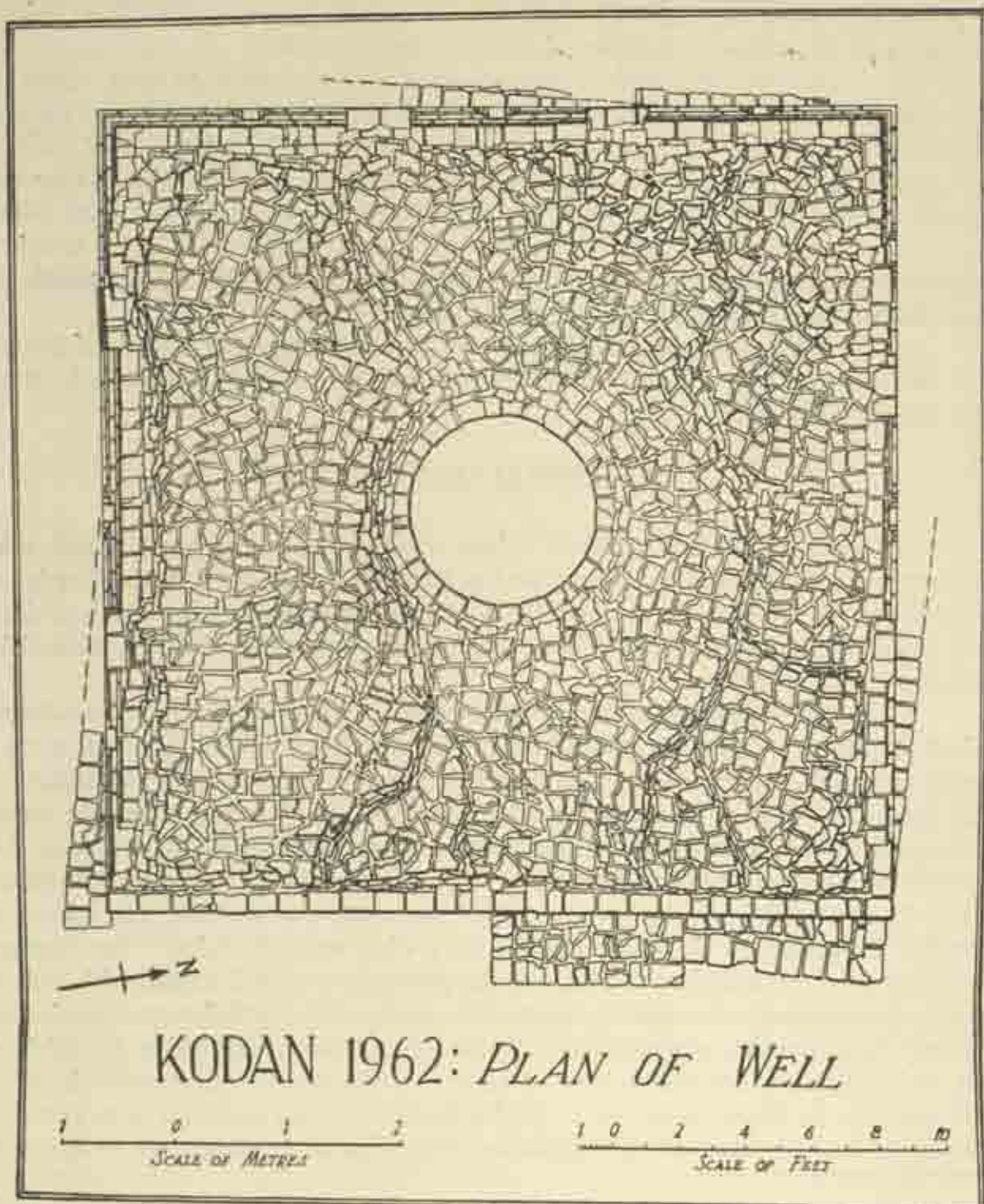


FIG. 33. Kodan: plan of the well

AK.G.1962

forces and vandalism and more in need of persistent maintenance which they failed to receive, these structures naturally decayed sooner than their stone counterparts.

7. THE STRUCTURES

A. THE WELL

Of the three structures exposed, the well (pl. LX and fig. 33),¹ as already noted, was stratigraphically the earliest. The brick platform, 7.011 m. square at the base, around the well, 1.625 m. in diameter internally, was the most singular of its kind. It was remarkable for the ornamental treatment of its four façades (pls. LVIII-LX, LXI B and LXII). Its maximum facing brickwork was available on the southern side (pl. LXII), where a small portion was extant to a height of 1.448 m. Above this facing only five courses of the core, rising to a height of another 25.4 cm., were available. Thus, the total height of the extant platform was 1.702 m. There are reasons to believe that the platform did not rise much higher.

The four façades had a recessed portion (75.5 cm. high) between the moulded base and top. The base-moulding was in the form of a *khurā* with a conspicuously high *muhāṇṭi*. Projecting from the body of the *khurā* but flush with the face of the *muhāṇṭi* were, at intervals, truncated stepped pyramids, two on the south side and three each on the remaining sides. These pyramids were decorated elegantly with beautiful compositions of floral and plant motifs (pls. LVIII-LX, LXI B and LXII). Of the top mouldings, which projected forward like corbels, only four (25.4 cm. high) were preserved at one place on the south face (pls. LXI B and LXII). The most receding was the bottom moulding which projected beyond the recessed middle to only 2 cm.: consisting of two courses of bricks it was boldly relieved with a wavy creeper. The next moulding was slightly curved and decorated with a row of ornate lotus-petals. The fillet-like third moulding was again relieved with a creeper pattern, though of a different design. On the fourth was a series of diamond-shaped pendants, separated from one another by a pair of small triangles.

The receding middle portion was plain but for two projecting vertical bands which, rising above the *muhāṇṭi* of the *khurā* of each face, reached the bottom of the moulded top. These bands, 95.5 cm. high, 55.9 cm. wide and 12.7 cm. thick, were relieved with ornamental tracery woven with floral and plant motifs (pls. LXI B and LXII).

Against the east face of the platform were the remains of a narrow oblong structure which might have served as a stair.

All the facing bricks were smoothly chiselled and polished, the joints being fine and hardly visible. The mortar was mud. In the core were used both bricks and

¹ The patches on the faces of the well as seen on this photograph (pl. LX) are due to rain-water.

brick-bats, the latter generally of large sizes.¹ The bricks were well-burnt and prepared out of clayey earth mixed with *kankar*-nodules, the composition of the top layer of the natural soil here.

The bricks of the innermost courses of the well had their visible face curved (pl. LXI A) and polished, the joints of the facing brickwork being fine. The mortar was sticky clay. The interior was found full of *débris*. A quadrant (pl. LXI A) of the well was dug to a depth of 3.658 m. from the extant top without encountering water.

Amidst the *débris* inside the well were found bones of animals (pl. LXI A, p. 184) and three carved stone pieces. One of them—a fragment (10.8 cm. high) of an image of mauvish red sandstone—was found at a depth of 3.353 m. Only the head of the image (pl. LXXXVI C) and right palm holding a sword behind the head are preserved. Around the head is an oval halo. In the ears are *kundalas*. The fragment represents the head of Mahishāsūramardini, a portion of the torso of which was found amidst *débris* near the ground-level of the eastern wall of the platform of Temple 1. The waist, portion of legs and three left arms of the deity are preserved in the second fragment (pl. LXXXVI C), 14 cm. high. The lowest left hand has caught hold of the hair of the demon and the next one holds a curved stick-like object (bow?), the fore-arm of the third broken. One of the missing right hands must have held a *triśūla* which pierces the body of the demon. Of the ornaments, beaded *valayas* (one on each wrist), a beaded girdle and armlets are preserved. Both the fragments are badly defaced. On the basis of the halo, the image may roughly be ascribed to about the ninth century A.D. From the find of a fragment of an image of Kārttikeya (pl. LXXXVI A) amidst the *débris* on the terrace (p. 171) of Temple 1, it is tempting to regard the images as representing *pārśva-ḍevatās*.

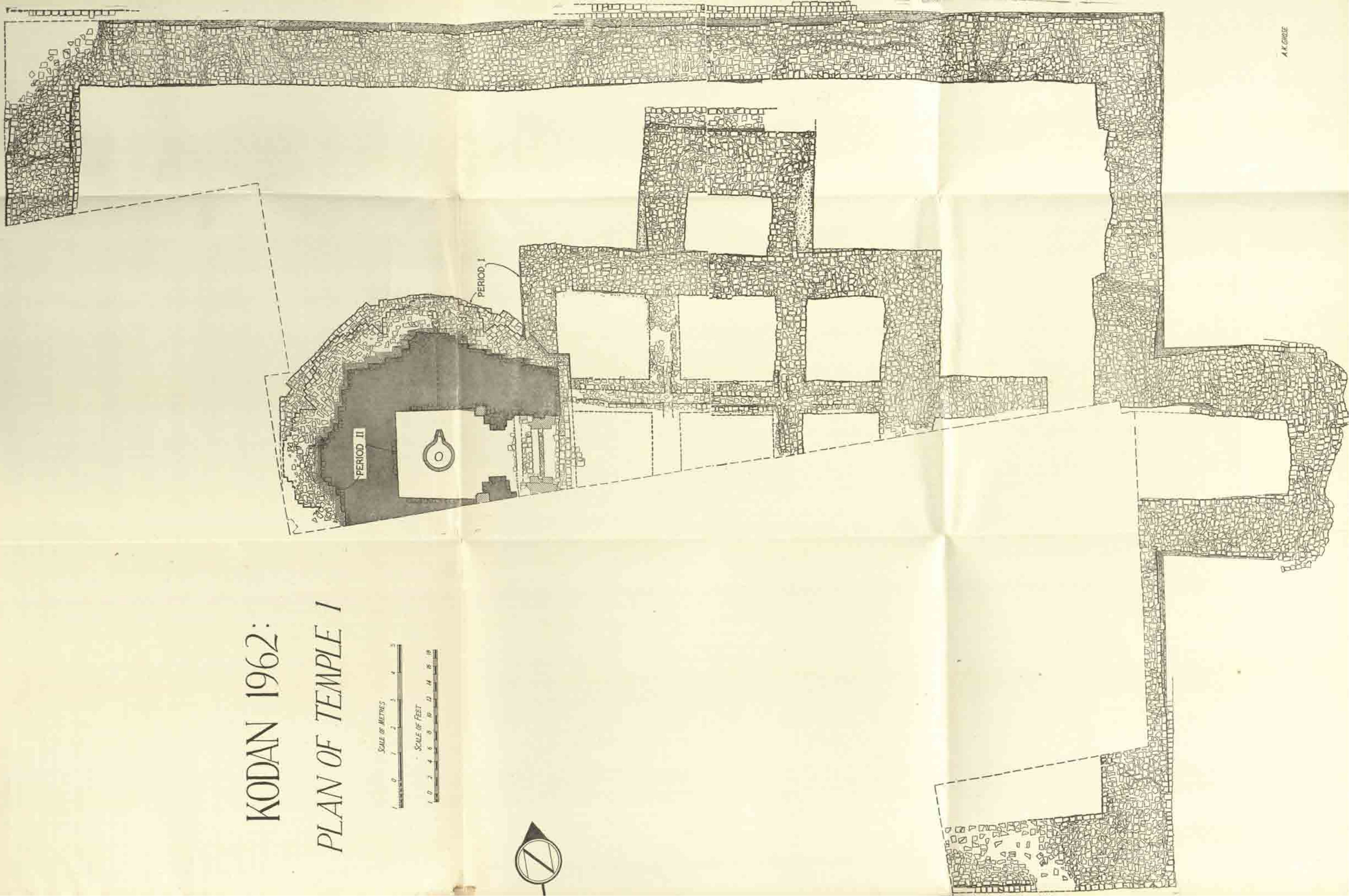
Of the remaining two fragments, both small and made of sandstone of greyish variety, one (12.7 cm. long and 5.1 cm. high), found at a depth of 3.607 m., is carved with a creeper pattern, now badly defaced, and the other (14 cm. long and 5.1 cm. high), found at a depth of 3.658 m., partially preserves a diamond-shaped (?) decoration.

B. TEMPLE 1

Temple 1 (pls. V, LXIII and LXIV), facing east, was of two Periods, the earlier one, consisting of a sanctuary and a compartmented porch, built almost immediately after the well. The earlier temple, of imposing dimensions, had already been reduced to its plinth, with a few courses of its base at odd places, when the later temple was erected over it. Still one can easily visualize its pristine grandeur from the surviving parts of its platform, which itself was the most exquisite of its kind. Even in its ruined state the temple is a majestic structure with a richly-ornamented ambitious platform.

¹ The sizes of full bricks are 31.7 × 19.7 × 5.1 cm., 30.5 × 19.7 × 5.1 cm., 30.5 × 19 × 5.1 cm., 29.8 × 19.7 × 5.1 cm., 29.2 × 19.7 × 5.1 cm., and 29.2 × 19 × 5.1 cm.

KODAN 1962:
PLAN OF TEMPLE I



(i) Platform

The platform, 42.367 m. long (east-west), 31.802 m. wide (north-south) and slightly above 4.57 m. high, was not of solid brickwork. It was made by constructing four brick walls, 2.44 m. wide on an average at the base, of which the northern and eastern ones were fully exposed. The walls enclosed some area surrounding the basements of the sanctuary and the porch. This intervening space was packed hard with yellowish clayey earth and *kankar*-nodules (pl. LXV), the composition of the top layer of the natural soil. The top of the walls and the clay-filling was made into a somewhat sloping terrace by laying a thick coat (2.5 cm. thick on average) of hard lime concrete (p. 183, sample no. 2) with a finished top. The concrete was laid over a thick packing of brick-grits and tiny brick-bats below which was a soling of brick courses. The number of the courses varied, as at one spot it was found to be three and at a second five.

The exterior facing of the four walls was traced in the excavated trench to a maximum height of 2.058 m. and the extant core rose to a further height of 38.1 cm. The outer façades were treated luxuriantly with exuberant mouldings and decorative ornaments in the best tradition of the terracotta architectural art (pls. LXVI-LXXIV).

The lowest portion, three to four bricks high, was plain. Above this, but receding by about 3.2 cm., were two and half courses, capped by a recess of half a course. Crowning this recess was a projection of two courses which formed a broad band decorated with a series of roughly circular designs. In these designs two semicircles joined each other in two decorative motifs; these circular motifs were separated from one another by a pair of half flowers. Above this and standing on a fillet was a cyma decorated with a row of petals, carved slantingly. The cyma was capped by a recess. The cyma, the band and the three courses below the band were clasped, at intervals, by stepped pyramids decorated with rich floriated patterns in which ornamental *pūrṇa-ghaṭas* featured prominently. Above the cyma was a *khurā* which, with its projecting bottom fillet and receding top fillet, consisted of six courses. The bottom fillet, which projected partly over the cyma, was decorated with a row of petals, each separated from the other by a group of three leaves. On the top fillet was a creeper pattern. The plain body of the *khurā* was relieved, at intervals, with projections, some wedge-shaped, others stepped, all floriated in elegant designs. Separated from the *khurā* by a thin recess was an ornate band crowned by a cyma treated with lotus-petals, often with a group of three leaves between two petals. Over this cyma was again a recess capped by a projected band decorated with a row of battlements. Projecting above this was a torus of three courses, its body decorated, at intervals, with reliefs, low but pleasing. Above this was the third cyma with treatment similar to that of the second. Receding from the latter was a band embellished with a row of circles, some of them with circular perforations inside and others with mango-shaped perforations. Over this band was a recess surmounted by an inverted *khurā* decorated with a series of ornate petals. Above this was a projected band done in two courses, the top of which was linked,

at intervals, with the bottom *khurā* by ornate *triratha*-projections (pls. LXVI-LXXI and LXXII B). This band was treated with variant designs. One of these designs was a row of semicircular flowers with the interior filled in with a plant motif; the flowers were separated from one another by a pendant ending in a motif resembling a betel-leaf (pls. LXVI-LXX). The design at a second place was a row of floral motifs, very artistically composed (pls. LXX and LXXI). Above this was a cyma treated with a row of lotus-petals. Projecting from a recess over this was a frieze of merlons. Projecting further above this was a truncated *khurā* with a plain body and foliated base-fillet. It was relieved, at intervals, with ornate projections, some wedge-shaped and others stepped. Above this was a projected band of two courses embellished with a series of ornate conches. The height of the moulded portion was 1.524 m.

Above the last band was the slightly recessed vertical wall, which was plain save for the broad vertical bands, that connected, at intervals, the bottom-mouldings with the missing top ones, and a few sporadic projections relieved with decorative motifs. The lowest part of one of the projections—inverted *khurā*-shaped bracket carved with lotus-petals (pls. LXVI and LXVII)—alone was extant on the north face. The bands were remarkable for their exuberant treatment and variety (pls. LXVI, LXVII, LXXI and LXXII A).

It may be presumed, from the façade of the well, that there were mouldings also near the top. These mouldings were, presumably, corbelwise, so that the last course was almost in plumb with that of the base.

In the middle of the east side of the platform, 12.090 m. away from both the ends, was a projection (pls. LXXIII, LXXIV and LXXV), 7.620 m. wide (north-south) and more than 6.706 m.¹ long (east-west), with interior filled in with yellowish clayey earth and *kankar*-nodules. The maximum height of the extant wall of this projection was available at its north-western corner, where it was 1.829 m. above the floor-level. The two partially-preserved north and south faces of this projection show that these two faces at least had decorations similar to those of the other parts of the platform. Thus, all the mouldings were found to run on the projection. Above the band with a row of conches were left only two courses of the facing brickwork (pl. LXXIII).

This projection, evidently, accommodated the stair, which gave access first to the top of the platform, next to the porch and ultimately to the sanctum sanctorum. On the south side of this stair at a height of 61 cm. above floor-level was found, amidst the débris, a carved sandstone piece of greyish variety. It (pl. LXXXVII A) preserved a part of a lotus-motif with five fingers (?).

The sizes of the full bricks² were in conformity with those of the well.

¹ The accurate measurement of the length could not be taken due to the disappearance of the facing brickwork of the east wall.

² Some of the measurements of the bricks of the platform were 30.5 × 20.3 × 7 cm., 29.8 × 20 × 5.1 cm., 29.8 × 19.7 × 5.1 cm., 29.2 × 20.3 × 5.7 cm., 29.2 × 20.3 × 5.1 cm., 29.2 × 19.7 × 5.1 cm., 29.2 × 19 × 5.1 cm., 28.9 × 19.7 × 5.1 cm. and 28.6 × 19 × 5.1 cm.

(ii) Sanctuary of Period I

The sanctuary was built on a solid brick basement which, evidently, lay invisible below the terrace of the platform, as the faces of the basement were roughly made. This basement was octagonal on plan,¹ each side distinguished from the other by wedge-shaped recesses (pl. LXXVI).²

The plan of the sanctuary immediately above the basement was also a modified octagon³ (pl. V), as the eastern face and nearly the half of the north-eastern and south-eastern faces flanking the eastern were made into an oblong (pl. LXXVII A) to provide access to the sanctum. The remaining sides of the octagon, with eleven small *ratha*-projections on the complete faces and six projections on the two halves and triangular recesses at the junction of the sides, presented the plan of a star. These triangular recesses were immediately above the wedge-shaped recesses of the basement. Of the walls of the sanctuary, very few courses were left even at the time of the building of the later temple which was built right on the basement of the earlier temple. In most places the wall was reduced to a single course, which even was missing at places. In the sinister flank of the north-eastern side there were three courses left. The maximum available courses in the excavated trench were at the north-eastern corner (pl. LXXVII) which lay covered by the wall of the porch (which was built unbonded against the wall of the sanctuary). With twenty-eight courses the wall was 1.295 m. high, while the visible junction between the sanctuary and porch preserved fifteen courses. From the extant facing (pls. LXXVII and LXXXI A), it is abundantly clear that the façade-treatment of the sanctuary, with its exuberant decoration, was of equal grandeur, if not more, to that of the platform.

The treatment of the lower portions of both the sanctuary and the porch was analogous to that of the platform. Thus, above a plain brickwork of six courses (pl. LXXVII), there was a recessed offset of two courses, the upper portion of the top course being again recessed. Above this was a projection of two courses decorated with the bottom motif (i.e. a row of two semicircles ending in two ornate motifs, each such composition separated from the other by two sets of half flowers) of the platform. Above this was a cyma, its body treated with slanting petals, each punctuated with a set of three leaves. Projecting over this was a *khurā* of six courses, of which the *muhāñji* of two courses was decorated at one place with a row of petals separated by a group of three leaves and at another place with a row of circles each having a mango-shaped socket within. The lower portion of the top course of the *khurā* was decorated with a creeper at one place and a row of circles and battlements at another place. The upper portion of the top course was

¹ As the front face of this octagon was not exposed, it is not known if this face along with the flanking halves of the south-eastern and north-eastern sides conformed to the octagon or not.

² Some of the sizes of the bricks of the basement were $29.2 \times 19 \times 5.1$ cm., $28.9 \times 19 \times 5.4$ cm., $28.6 \times 19.7 \times 5.1$ cm., $28 \times 17.8 \times 5.1$ cm. and $26.7 \times 19 \times 5.1$ cm.

³ The octagonal form, to judge from the ruins of Bikuli and Tilaura-kot, exposed by P. C. Mukherji (*op. cit.*, pls. III and XIV), seems to have been in wide currency in this region.

recessed and was crowned by a projected ornate band. Above this band was a cyma with decoration similar to that of the first cyma. The next course had a row of battlements. The plain torus above this was crowned by a cyma analogous to the first and the second. The course over this had its face broken. It was capped by an inverted *khurā* carved with petals having a row of three leaves in between. Two more courses with their faces damaged were available over this.

As on the face of the platform, there were insets relieving the mouldings. One such inset (pl. LXXVII B) was partially preserved right in the middle of the face of the north-eastern side. Thus, above the bottom cyma was a projected band with a row of petal-shaped battlements. Separated from this by a recess was a *kañi* capped by a corbel of two courses with curved face and decorated with a row of petals. Above this was a projected band of one course decorated with a creeper motif. Over this and slightly recessed were available two courses alone. These were perforated with a trellis-pattern. The flank immediately to the sinister of the central inset had over the cyma a fillet decorated with a row of circles (in line with the row of battlements). Above this, but separated by a recess, was a *kañi*, over which was an inverted *khurā* of two courses embellished with petals. From a tiny piece of thin plaster sticking to the brickwork of this face it may be presumed that the facing received a fine coat of plaster.

The extant portion of the front face (pl. LXXVII A) of the sanctuary was plain except for a plain *khurā* (at the base), the latter in a line with the *khurā* of the north-eastern side. The vertical wall above the *khurā* receded inwards from the plumb of the body of the *khurā*.

As the superstructure of the temple was missing, it is not known how it looked like. In the core of the wall of Period II (p. 170) of Temple I were found some fragments of brick *āmalakas* which were utilized evidently from the ruins of the earlier temple. These *āmalakas* were segments of a circle. Whether these formed part of the pinnacle or served as *bhūmi-āmalakas* is unknown.

(iii) Porch

The west wall of the porch was not bonded with adjoining portion of the sanctuary (pl. LXXVIII A). Rather, as already noted, it covered the carved face of a large portion of the north-eastern face of the sanctuary. Evidently, the sanctuary was finished first and the porch was subsequently built against it. As the carvings on the extant face of the porch were identical not only in composition but also in style with those on the sanctuary, it may be presumed that the porch was not far removed in date from the sanctuary. Indeed, the uncarved front side of the sanctuary anticipated the provision of a porch from the very beginning. Presumably, the size of the porch exceeded the original specification with the result that portions of the carved face of the north-eastern and south-eastern sides of the sanctuary got covered.

The exterior face (pl. LXXVIII B) of the porch was extant to a height (96.5 cm.) of eighteen courses (on the north face), of which the bottom five courses were plain. Above the fifth course (from the bottom) was a recessed offset of two plain courses, of which the upper portion of the top course, as in the case of the sanctuary, was again recessed. Above this were a projecting band of two courses, a cyma of a single course and a *khurā* of six courses, with decorations similar to those on the identical mouldings of the sanctuary. The plain body of the *khurā* was relieved, at intervals, with ornate projections, of which the extant one was wedge-shaped. The upper portion of the top course of the *khurā* was recessed. Projecting over this was a band of one course treated with a row of ornate motifs. Above this and slightly receding was a cyma decorated with a row of ornate petals, each petal separated from the other by a group of three leaves.

The interior, nearly two-thirds of which were exposed, seemed to have been partitioned into nine compartments with walls thinner in width than the outer walls. Into these inside walls were provided chases (pl. LXXIX), 25.4 cm. wide on an average, which, evidently, received long horizontal bars, stony or wooden, possibly the latter. These bars presumably served as bases either to wooden partition-walls or pillars. In case they formed the base for the pillars, the interior was a long hall accommodating a fairly large assemblage. In that case the pillars supported the ceiling.

The inside walls were preserved to the height of the floor-levels, the outer walls being a few courses higher. The compartmented floor was made of lime concrete (p. 183, sample no. 3), 2.5 cm. thick on average. The upper surface of the concrete was finished and coloured dark brown. The floor was laid over a packing of brick-grits and small brick-bats. Below the packing was a soling of brick courses—six found in one place. Below this brickwork was the filling of natural soil.

In the north wall, near the north-western corner, was the provision of a channel for the drainage of water.

Projecting from the central part of the north and south sides of the porch was an ancillary cell (northern one exposed) integral with the porch. Its entrance was evidently through the porch. The four walls of the exposed northern cell were thicker than the inner walls of the porch. The exterior face of the northern cell, which was bonded with the walls of the porch, was treated in the same manner as the walls of the latter. All traces of the floor of this cell had vanished.

The bricks¹ of the facing, wherever plain, were chiselled and smoothly finished as in the case of the sanctuary. The mortar was as usual sticky clay.

Roughly in line with the north wall of the eastern projection of the platform, but unconnected with it, was a wall projecting from the porch. As the area south of this wall was not excavated, it could not be determined whether the wall formed part of a cell

¹ Some of the sizes of the full bricks were 31.7 × 19.7 × 5.1 cm., 31.1 × 21.6 × 6.3 cm., 30.5 × 20.3 × 5.1 cm., 30.5 × 19.7 × 5.1 cm., 30.5 × 19 × 6.3 cm., 29.8 × 20.3 × 5.7 cm., 29.8 × 19.7 × 5.1 cm., 29.2 × 21.6 × 5.1 cm., 29.2 × 21 × 5.7 cm., 27.9 × 19 × 5.4 cm. and 26.7 × 18.4 × 5.1 cm.

or it accommodated a stair for giving access to the porch. Possibly it was a cell serving as an entrance-porch.

A few architectural fragments were recovered from the top of the northern flank of the platform. Made of sandstone of slightly mauve-red colour, three (one in two pieces) of them had a moulded base (pl. LXXXVIII A). The band at the base had a scroll in low relief. Separated from this by a recess was a *noli*. The recess above this was crowned by a projection with a band, the latter carved in low relief with a creeper pattern, below. The projection was crowned by a recess. Two of these stones had a projected inset, its base having the band with a scroll and the *noli* and upper portion a rough *torana* with a diamond-shaped flower inside. Both these pieces were corner stones, as may be seen in the sidewise turn of the mouldings. The extant height of the highest piece was 25.4 cm. Possibly, these pieces formed part of the temple.

Also on the platform was found a fine piece of gargoyle (pl. LXXXVII B), made of this very kind of sandstone. It represented a composite head of a *makara* with the tusks of an elephant. On the forehead was a floriated scroll which issued from the mouth of a *kīrti-mukha*. The eyes were large and protruding.

(iv) Sanctuary of Period II

When the sanctuary of Period I had given way, a new sanctuary (pls. LXXX-LXXXV) was built on the earlier octagonal plinth. Evidently, the new builders were of poor resources and limited artistic vision, for not only did they attempt to reproduce any carvings, but actually they utilized the ornamental bricks, recovered from the debris of the earlier temple, in the facing of the new temple in the most inartistic way. Carved bricks were also used in the core of the structure.

Internally 3.277 m. square, the sanctuary had its three exterior sides broken into thirteen *rathas* including the small projections flanking the central projection and nine excluding them (pls. LXXX B and LXXXII). The maximum height of the wall-facing, available on the north face near the north-eastern corner (pl. LXXX B), was 2.882 m. The lower portion of the exposed north and west walls had nine step-like offsets (gradually receding from the bottom), respectively of ten, four, four, four, four, three, three, three and three courses from bottom upwards. The top edge of the second (from the bottom) and the ninth offsets was chamfered, while that of the third to eighth was rounded. Above the ninth offset was the vertical wall, relieved, at intervals, with projecting bands. Two such bands, both of two courses, were available—the bottom band above the eighth course and the second over the fifth course above the bottom band. The top edge of the second band was chamfered.

The front face was *triratha*, and it had a single offset above the level of the opening of the entrance-door.

Internally, the sanctum had pilasters at corners. The stone bases of the pilasters of the north-eastern and south-eastern corners were found *in situ*. The one (pl. LXXXIII A, near the scale) at the north-eastern corner had traces of carved petals, while that at the south-eastern had its face relieved into three mouldings. Perhaps these stone blocks were taken from the earlier structure.

Laid over a packing of brick-grits, the floor of the sanctum was made of concreted lime plaster (p. 183, sample no. 4), 2.5 cm. on an average thickness, the smoothly done top being coloured. Below this floor was another floor, presumably of the first period of Temple 1, laid over a solid brickwork. The top of this bottom floor of lime concrete (p. 183, sample no. 5), 3 to 3.5 cm. thick, was coloured red.

Right in the centre of the sanctum was the object of worship, a *linga* (pl. LXXXIV) of sandstone (?), with its top damaged. Around the *linga* was a monolithic *arghyapaṭṭa*, 14.6 cm. high; its faces were in three receding facets, the central being rounded. In line with the channel of the *arghyapaṭṭa* was a corbelled drain made into the thickness of the northern wall. The projected mouth of the drain, outside the north wall, was in the form of a composite head, partly of a bull and partly of a *makara* (pls. LXXX, LXXXI A and LXXXII). Around the head was a beaded garland. Horns were also decorated with beaded strands, three in number.

The stepped passage (pl. LXXXIII B), provided into the thickness of the east wall of the sanctuary, had on either side two pieces of stones, placed side by side and relieved into three mouldings (pl. LXXXV A). There was a recess between the stones. The central step had two horizontal chases (pls. LXXXV B and LXXXVI B), in which were found charred wooden planks. Over the remaining two steps also was found charred timber. Over the top step was most probably placed the wooden sill, charred wood found on it possibly belonging to it. The top of this step was roughly in one level with that of the floor of the sanctuary.

Whether there was a porch to this sanctuary is not known. All traces of it, if any, had vanished. That there was a terrace in front of it is proved by large patches of plaster (p. 183, sample no. 6), 3 cm. on average thickness, its top, 20.3 cm. higher than the floor of the early porch. Below the plaster was a packing of brick-grits and small brick-bats. This terrace covered completely the chases of the early porch. Thus, the early porch, too, fell into ruins before the building of the new temple. The extant portion of the wall perhaps served the purpose of a platform in front of the new temple.

The cause of the ruin of the new temple was fire which left its indications not only in the charred wood but in the brickwork which showed traces of burning.

Immediately outside the east wall of the sanctuary and on the terrace was found, amidst the debris, the fragment of an image of Kārttikeya (pl. LXXXVI A), made of soft sandstone (?) of slightly reddish colour. The fragment (12.7 cm. high) represented the bent right knee, right fore-arm with a *mātuluṅga* on the palm of the deity and the upper portion of a peacock pecking at the *mātuluṅga*. The image seemed to have

been seated in *lalitāsana*. The fore-arm and the extant portion of the leg were grooved, curiously enough, with angular lines.

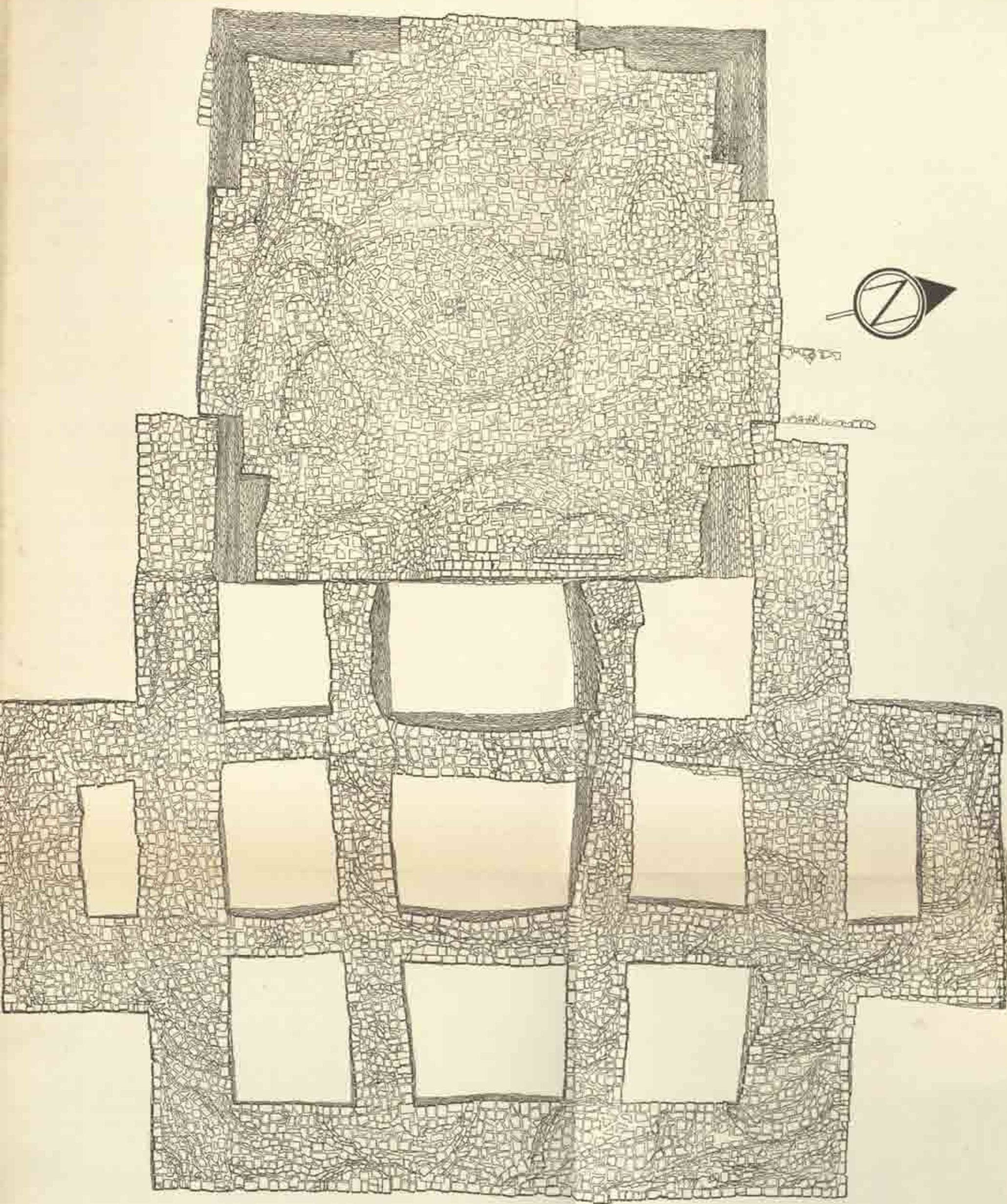
C. TEMPLE 2

The fourth mound yielded the remains of a sanctuary (pls. LXXXIX-XCVI), called Temple 2, and eleven cells in three rows, the rear row of the latter abutting against the east face of the former (pl. VI). The curious feature of this complex was that the major part of the basement, which went very little below the ground, was erected above the ground to a considerable height and was embedded into an exceptionally compact filling of yellowish clayey earth and *kankar*-nodules (pls. XCII-XCIV). The filling-material, which consisted of natural soil, was possibly secured from the tank mentioned above. This filling gave the appearance of a platform around the complex. How the face of this mud platform was secured is not known. Either it had a brick retaining wall, which has disappeared entirely, or it was covered with some sort of plaster to arrest the percolation of water. The basement, which was of solid brickwork,¹ was a square at the base. Gradually its three sides (north, south and west) became *triratha* at a height of about 1.67 m. and ultimately *pañcharatha* near the top (pl. XCIII). Some portions of the basement were battered.

Of the superstructure rising above the embedded basement, nothing has survived except a small fragment of the lowest portion of the base of the east face (pl. XCV A). This fragment consisted of nine courses in four offsets, the lowest of six courses and the remaining ones of one course each. The faces of these courses were smoothly chiselled and polished. The interior floor of the structure was at a level higher than the top of the extant topmost offset, as two courses of the core of the basement were found rising above the level of this offset at places. The thick floor, not a patch of which was found *in situ*, was of lime concrete (p. 183, sample no. 7), 5 cm. on an average thickness. Its finished top was coloured red.

As already noted, the east face of the sanctuary did not have any projection. Abutting against this wall, but unbonded with it was a group of eleven cells (pls. LXXXIX-XCI, XCVI and XCVII) in three rows, the middle row having five and the two flanking ones three each. The central cell of the three rows was the largest, while the two outermost cells of the middle row were the narrowest. No door-opening to any of these cells was available, which is but natural in view of the extant walls being intended as foundation. The interior of all the cells was found packed compactly with yellowish clayey earth

¹ Some of the sizes of the full bricks in the filling of the core were 31.1 × 22.2 × 5.7 cm., 31 × 21.5 × 5.5 cm., 30.8 × 21 × 5.1 cm., 30.5 × 21 × 5.1 cm., 30.5 × 20.3 × 5.4 cm., 30.5 × 20.3 × 5.1 cm., 30.5 × 19.7 × 5.1 cm., 30.2 × 20 × 5.7 cm., 30.2 × 19.3 × 5.1 cm., 30 × 20 × 5.5 cm., 29.8 × 19.7 × 5.4 cm., 29.8 × 19.7 × 5.1 cm., 29.8 × 19.7 × 4.5 cm., 29.8 × 19 × 5.1 cm., 29.2 × 21 × 5.7 cm., 29.2 × 19.7 × 5.4 cm., 29.2 × 19 × 5.1 cm., 29.2 × 18.7 × 5.1 cm., 28.6 × 19.7 × 7 cm., 28.6 × 18.7 × 5.7 cm., 28.3 × 19.3 × 6.3 cm., 27.9 × 20.3 × 5.1 cm., 27.9 × 19.7 × 5.7 cm., 27.9 × 19.7 × 5.4 cm., 27.9 × 17.8 × 5.1 cm., and 27.6 × 18.7 × 5.4 cm.

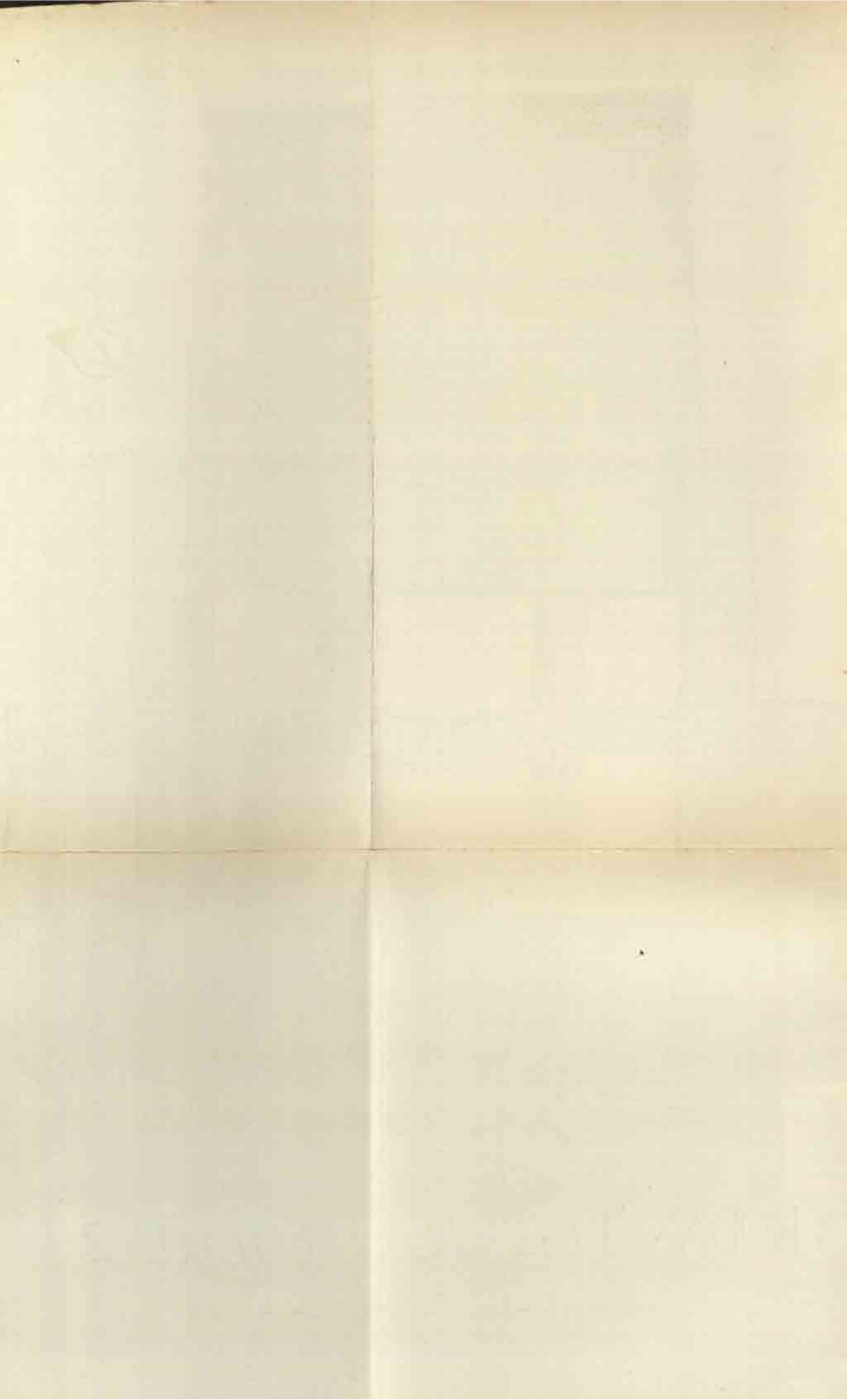


KODAN 1962: *PLAN OF TEMPLE 2*

AK GHOSE

SCALE OF 1 0 2 4 6 8 10 FEET

SCALE OF 1 0 1 2 3 METRES



mixed with *kankar*-nodules. The sizes of the bricks used in these cells conformed to those of the sanctuary.

Entrance to the sanctuary was most probably through the central cells of the three rows. Presumably, there was a stair or ramp giving access to the central cell of the easternmost row, but it has disappeared completely.

As the arrangement of the foundation-cells was similar to that of the porch of Temple 1, it may be presumed that over nine of the foundation-cells was erected the porch, the interior of which was either partitioned or had pillars. These partitions (or the pillars) were most probably of wood, a presumption partly supported by the find, amidst the debris of this temple, of not less than eighteen iron clamps (pl. LXXXVIII B) which, with two nails attached to the ends, were, no doubt, intended for holding two planks together. These clamps were flattish and oblong with two ends slightly splayed out, so that the ends were broader than the middle portion. The attached nails, squarish in section, were fixed into two square holes made into these clamps. The largest of these clamps was 18.4 cm. long, 3.8 cm. broad at the ends, 2.5 cm. broad in the middle and .006 cm. thick. The smallest clamp was 11.4 cm. long, 2.8 cm. broad at the ends, 2.2 cm. broad in the middle and .003 cm. thick. Six such clamps were again found on the top of the platform of Temple 1.

The multitude of decorated bricks that were found in the debris of the temple speaks eloquently of the grandeur of the temple in its ornamental brickwork, when intact. Some of these bricks are illustrated on plates XCVIII-CXII. Remarkable for a variety of designs and skilled workmanship, these bricks were generally in the tradition of those of Period I of Temple 1.

This temple leaves no room for doubt that many of the ancient temples of northern India, particularly of the upper Gangetic valley, of which bare basements now stand, were decorated originally with ornamental brickwork. It may further be presumed that at least some of these basements, which were of rough brickwork, were meant to be embedded within the filling of platforms of clayey earth with or without brick lining.

No image was found either above the temple or in its immediate vicinity.

The number of antiquities from the site is extremely limited. Apart from the pieces of sculptures, architectural fragments and iron clamps already noted in their respective contexts, there were a few small finds in the form of terracotta discs, glass and paste bangles and miscellaneous iron objects. The last include (i) a bent nail with a thickened head and squarish section found on the floor above ground by the side of the eastern face of the platform of Temple 1, (ii) fragment of a bar of squarish section, 11.7 cm. long, found on the ground immediately below the floor by the side of the northern flank of the platform of Temple 1, (iii) a long flattish object with pointed ends and a small nail fixed to it through a hole, 24 cm. long and 1.2 cm. wide in the middle, found on the platform of Temple 1, (iv) a hook found in the filling inside a foundation-cell of the porch of Temple 2, (v) fragment of a curved object with a perforation and wedge-shaped section

found on the terrace in front of Temple I of Period II and (vi) a long bar with an oblong section, a pointed tip and a triangular head found on the top of the basement of the sanctum of Temple I.

8. THE POTTERY

Sherds recovered from Kodan were limited in number which is but natural in a purely temple-site where earthen vessels were mainly in use for the cooking of *bhoga* and storage. The regular sweeping around the living temples is not conducive to accumulation and formation of the well-stratified deposit. Consequently, the sherds from temple-sites are often of little value for the determination of pottery-sequence. Sherds illustrated here have mainly been selected from the deposit immediately on the floor-level around the temples, the floor being on the natural soil. Even then all of them cannot be regarded as the earliest ones, as the premises immediately round the temples must have been under constant cleaning; consequently, they can hardly be utilized for chronometric purposes. Leaving aside a few stray types found usually in the débris of the temples, the pottery, on the whole, marked neither any significant changes nor basic difference in the ceramic industry, and most of the illustrated types were found represented in the sherds collected from the débris of the temples. It bespeaks an essentially integral culture so far as the fabric, firing and slip are concerned. Minor changes in shapes could not be established in the pottery-sequence for the reason explained above.

The secure dating of the pottery and its proper position in the chronological context could not be determined in the absence of a corpus of pottery of a comparable period. Some sherds of the late group of Ahichchhatrā have a seeming affinity with the pottery of Kodan, but the published report is too condensed for a comparative study. Consequently, this pottery has to be re-examined for the purpose of determining its precise chronological horizon as and when the north Indian sites with similar pottery are excavated.

The pottery was an exclusively red ware industry. The fabric generally ranged from tolerably fine to medium, though a few coarse sherds were also met with. The baking was usually good. The entire range of pottery was wheel-made. While bowls of Type I were completely potted on wheels, most of the vessels were retouched with beaters after having been wheel-turned. Moulds do not appear to have been used. The ware had for the most part a red slip, usually of deep shade. In most cases the inner side of the vases below the neck was left without slip. The outer body below the neck of several vases was superficially mica-dusted.

The range of shapes was quite limited, the vases, including cooking *hāṇḍīs*, being overwhelmingly predominant. Other kinds of vessels like bowls, lids and basins (or cooking-pans) formed only a small percentage. The common types were V, VI, XI, XVIII, XIX, XX, XXI, XXVI, XXXI and XXXII. Lug-handles were conspicuous by their absence. Fragments of single-spouted vases were fairly common.

Painted sherds were altogether absent.

Decorated pottery formed a fairly small percentage. The range of decoration was limited to incised patterns, finger-tip impressions on applied bands (pl. CXIII, 16) and triangular indentations (pl. CXIII, 2), the last two less frequent. The designs were executed, to judge from the lingering slip on them in several specimens, before the firing of the pots. They usually embellished either the shoulder or the body immediately below the shoulder.

The incised decorations, which seem to have been popular, consisted of: (i) a close-knit zigzag line with acute angles in between borders of concentric grooves (pl. CXIII, 5 and 8); (ii) a zigzag line meeting a top groove and consequently producing the effect of a series of triangles, each of the latter having a roughly vertical stroke hanging from the apex and one or two horizontal wavy strokes within (pl. CXIII, 1 and 4); (iii) criss-cross pattern in between a double border of concentric grooves (pl. CXIII, 6, 9 and 18); (iv) sets of oblique strokes—two, three or four—parallel to one another, repeated at close intervals (pl. CXIII, 7 and 13); (v) an oblique stroke meeting or near which are smaller oblique strokes, the pattern repeated at close intervals (pl. CXIII, 7); (vi) a rough semicircle containing within three or four oblique strokes, resting above a double concentric groove, the design repeated at close intervals (pl. CXIII, 19); (vii) wavy line, either single or triple, in between concentric grooves (pl. CXIII, 10, 11 and 18); and (viii) a vertical line joined on either side by oblique lines (pl. CXIII, 3). The designs on some fragments (pl. CXIII, 12, 14, 15, 20 and 21) were too indistinct to present a clear-cut idea. With the exception of the pattern no. 8 (pl. CXIII, 3), all are faintly incised. Pattern nos. 1 and 7 and partly pattern no. 2 are respectively similar to 21, 19 and 20 from Stratum I (A. D. 850-1100) of Ahichchhatrā. These designs are stated to have occurred in Stratum II (A. D. 750 to 850) as well.¹

The perforated sherd, illustrated on pl. CXIII, 17, appears to have been the base of perhaps a strainer.

Below are illustrated the representative types. The selected specimens, unless otherwise stated, came from the deposit immediately above the floor-level around the structures.

Figs. 34-36

Type I. Bowl with an almost vertical featureless rim and gradually-receding sides. Of tolerably fine fabric, it is devoid of any slip. *Variant Ia* differs from the above by its everted rim with a groove below on the outer side. Of tolerably fine fabric, it is devoid of any slip. *Variant Ib* differs from the main type by its out-turned internally-bevelled rim. Of tolerably fine fabric, it is devoid of any slip. *Variant Ic* differs from the preceding by its doubly-bevelled sharpened rim. Of fairly fine fabric, it is devoid of any slip. *Variant Id* differs from the main type by its out-turned grooved rim. Of tolerably

¹ *Ancient India*, no. 1 (January, 1946), pp. 50 and 51 and fig. 8.

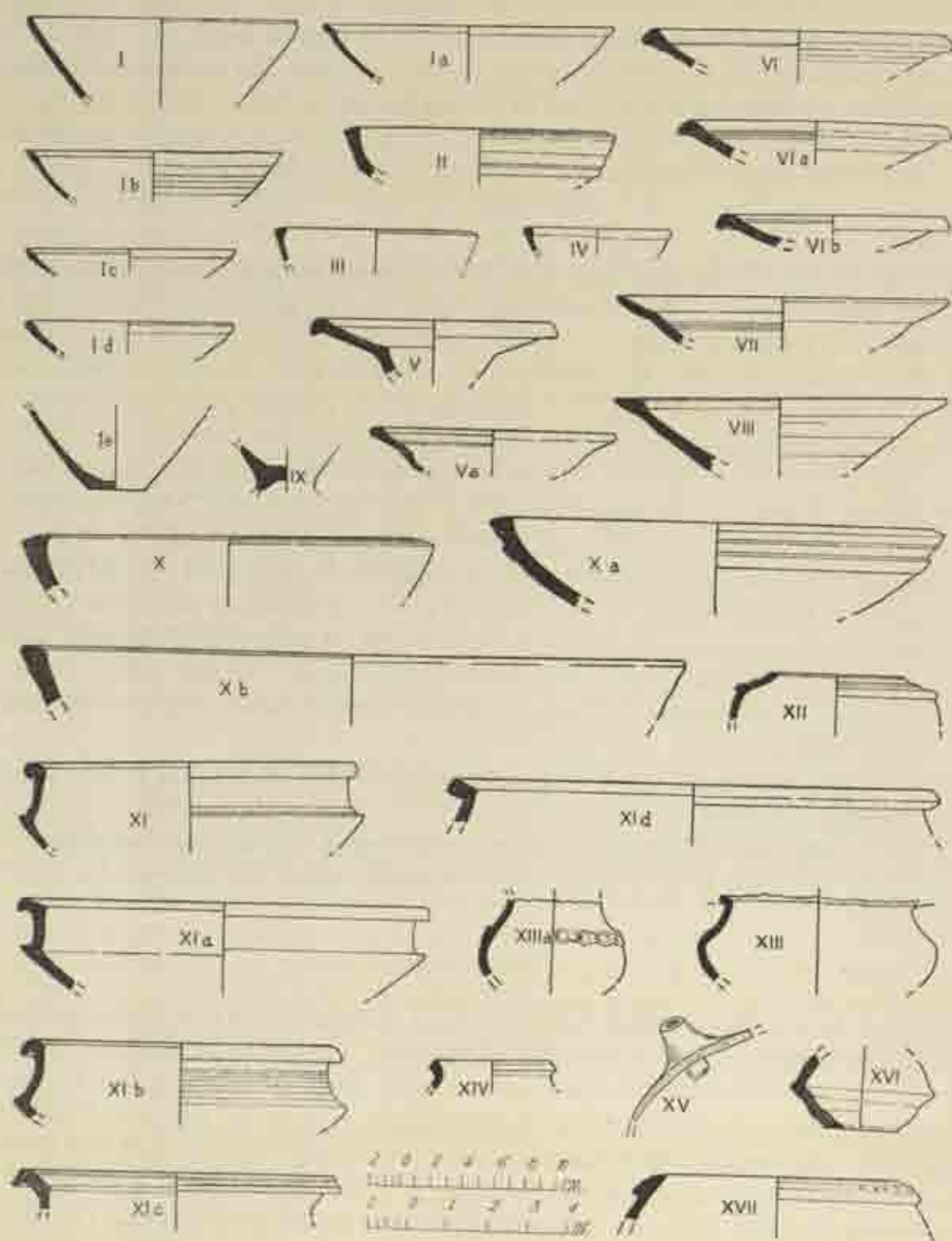


FIG. 34. Kodan: pottery

fine fabric, it is treated with a slip mostly flaked off. *Variant 1e* is the lower portion of a bowl with receding sides ending in a flat base with thread-marks. Of fairly fine fabric, it is devoid of any slip.

Type II. Shallow bowl of red ware with a vertical flat-topped rim with two grooves on the top and corrugated sides curving to a presumably flat base. Of medium fabric and mica-dusted surface, it preserves a red slip. This is a rare type found amidst the debris of the platform of Temple 1.

Type III. Bowl with an almost vertical nail-headed rim and gradually-receding sides. With slip flaked off, it is of tolerably fine fabric. This type is rare and found amidst the debris of the platform of Temple 1.

Type IV. Bowl with an almost vertical nail-headed rim and inconspicuously-convex sides. Of fairly fine fabric, it is provided with a red slip. This type is rare and found amidst the debris of Temple 1.

Type V. Lid with a flaring externally-clubbed rim, a carinated waist and an inner central cup-like depression. Of medium fabric, it preserves a red slip. *Variant Va* differs from the above by its internally-collared rim and less pronounced carination. Of fairly fine fabric, it is treated with a red slip, mostly flaked off.

Type VI. Lid with an out-turned thickened and bevelled rim and sharply-receding sides. Of medium fabric, it is provided with a red slip. *Variant VIa* differs from the above by its flaring internally-thinning rim. Of medium fabric, it preserves a red slip. *Variant VIb* differs from the preceding by its externally-clubbed rim. Of medium fabric, it is provided with a red slip.

Type VII. Lid with a splayed-out featureless rim, a bluntly-carinated waist and grooves on the inner side of the body. Of medium fabric, it bears a red slip. This type is rare and found amidst the debris of Temple 2.

Type VIII. Lid-cum-bowl with an out-turned internally-collared rim and gradually-receding sides. Of medium fabric, it presents a red slip internally.

Type IX. Vessel with a ring-base. Of fairly fine fabric, it is devoid of any slip. This type is rare.

Type X. Basin or more probably frying-pan of dull-red ware with a slightly out-turned internally-thickened rim having grooves on the top and receding sides. Of coarse fabric and sparsely mica-dusted surface and with traces of soot on the outer side, it bears a red slip. *Variant Xa*, of dull-red ware, differs from the above by prominent ribs below the rim and absence of grooves on the top of the rim. Of coarse fabric and sparsely mica-dusted surface and with soot on the outer side, it is provided with a red slip. This variant can as well be used as a lid. *Variant Xb* differs from the main type by the absence of grooves on the rim which is not thickened internally. Of medium fabric, it bears a red slip. This type is not very common.

Type XI. Cooking-hāndī of dull-red ware with a splayed-out folded rim, a cordon above waist and a prominently-ridged and carinated waist. Of medium fabric

and mica-dusted surface, it is treated with a slip turned smoky. *Variant XIa* differs from the above by its clubbed rim and absence of the cordon. Of medium fabric, it presents a red slip on the upper part. This is somewhat analogous to *Type 65* from Stratum I of Ahichchhatrā. *Variant XIb* differs from the preceding by its drooping rim and grooves above the waist. Of medium fabric, it preserves a red slip on the rim and the upper part of the body externally. *Variant XIc* differs from *XIa* by grooves on the rim. Of medium fabric, it is provided with a red slip. *Variant XId* differs from the main type by its externally-thickened and grooved rim. Of medium fabric, it is treated with a slip turned smoky. This type is somewhat analogous to *Type 66* found in Strata I-III at Ahichchhatrā.

Type XII. Small neckless vase with a closing featureless rim, a cordon on the shoulder, a rib on the waist and a globular body. Of fairly fine fabric, it is devoid of any slip. This type is rare.

Type XIII. Small vase with a bulging body. Of smoky grey core and medium fabric, it is provided with a red slip, mostly flaked off. *Variant XIIIa* is distinguished by an applied band with finger-tip decoration. Of fairly fine fabric, it is treated with a red slip externally.

Type XIV. Small vase with an out-turned grooved rim and a constricted concave neck. Of fairly fine fabric, it bears a red slip. This type is rare and found amidst the débris of the platform of Temple I.

Type XV. Fragment of a single-spouted vase. The cylindrical hand-made spout, made separately, was inserted into the vase. Of medium fabric, it presents a red slip externally and has a mica-dusted surface.

Type XVI. Small vase with a carinated and ridged waist and a flat base. Of tolerably fine fabric, it bears a red slip externally. This type is rare.

Type XVII. Vase, a solitary specimen, with a narrowing externally-collared, grooved and partially-notched rim and a globular profile. Of medium fabric, it preserves a red slip. This was found amidst the débris of the platform of Temple I.

Type XVIII. Vase with a splayed-out externally-beaded rim having a ridge at the base internally and a long concave neck. Of tolerably fine fabric, it preserves a red slip on the outer side and the uppermost part of the inner side. *Variant XVIIIa* differs from the above by its bevelled and grooved rim which is not beaded. Of tolerably fine fabric and mica-dusted outer side of the profile, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XVIIIb* differs from the main type by its almost horizontally splayed-out rim with an additional ridge on the top and grooved neck. Of tolerably fine fabric, it is provided with a red slip. *Variant XVIIIc* differs from the preceding by its externally-bevelled and undercut rim. Of medium fabric, it presents a red slip, mostly flaked off. *Variant XVIIId* differs from the preceding by its externally grooved rim. Of tolerably fine fabric, it bears a red slip.

Type XIX. Vase with a flaring externally-clubbed rim having a ridge at the base internally, a grooved neck and a gradually-expanding shoulder. Of medium fabric,

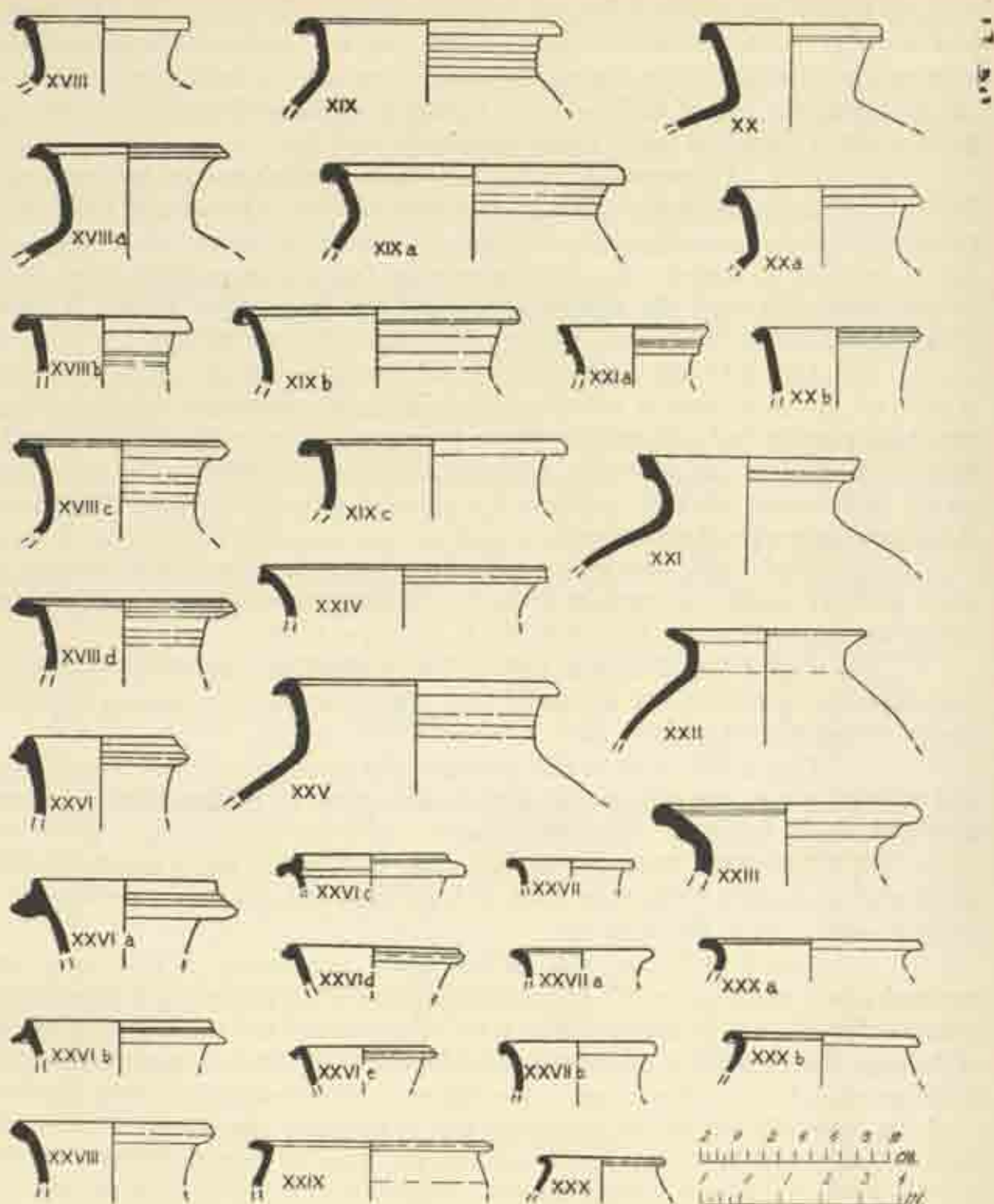


FIG. 35. Kodan: pottery

it presents a red slip, mostly flaked off. *Variant XIXa* differs from the above by its beaked rim. Of medium fabric, it is provided with a red slip. *Variant XIXb* differs from the main type by its drooping rim. Of medium fabric, it preserves a red slip on the outer side and the uppermost part of the inner side. *Variant XIXc* differs from the main type by its grooved rim. Of medium fabric, it is provided with a red slip.

Type XX. Vase with an out-turned externally-thickened and inconspicuously-beaded rim, a carinated neck and an expanding shoulder. Of tolerably fine fabric, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XXa* has a prominently-beaded rim. Of tolerably fine fabric, it is provided with a red slip on the outer side and the uppermost part of the inner side. *Variant XXb* has a groove on either side of the bead. Of fairly fine fabric, it bears a red slip.

Type XXI. Vase with an out-turned externally-collared rim having a central groove on the outer side, a concave neck, a gradually-expanding shoulder and presumably a globular body. Of medium fabric, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XXIa* differs from the above by an additional groove on the collar. Of medium fabric, it is provided with a red slip externally and on the uppermost part of the inner side.

Type XXII. Vase with a splayed-out featureless rim, a short straight neck and a globular profile. Of medium fabric, it is treated externally and on the uppermost part of the inner side with a slip turned black. This type is rare.

Type XXIII. Vase with a splayed-out externally-thickened rim with a prominent depression externally and a concave neck. Of coarse fabric and porous section, it is devoid of any slip. This type is rare.

Type XXIV. Vase of dull-red ware with an out-turned externally-thickened and undercut rim having two grooves and a concave neck. Of medium fabric, it presents a red slip, mostly flaked off. This type is rare.

Type XXV. Vase with an out-turned nail-headed rim, a grooved neck and an expanding shoulder. Of medium fabric, it is provided with a red slip externally and on the uppermost part of the inner side.

Type XXVI. Vase with an out-turned rim having a prominent ledge, inconspicuously undercut, with two grooves on top and a high almost straight neck. Of tolerably fine fabric, it is provided with a red slip externally and on the uppermost part of the inner side. *Variant XXVIa* differs from the above by three prominent grooves on the ledge which is not undercut and a receding neck. Of tolerably fine fabric, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XXVIb* differs from the main type by its inconspicuously-concave ledge of thinner section. Of tolerably fine fabric, it is provided with a red slip. *Variant XXVIc* differs from the preceding by its convex ledge and a groove below the rim internally. Of tolerably fine fabric, it bears a red slip. *Variant XXVI d* has a less prominent ledge, slightly concave above, and a receding neck. Of fairly fine fabric, it is provided with a red slip. *Variant XXVIe*

differs from the preceding by its undercut ledge of thinner section. Of fairly fine fabric, it is provided with a red slip.

Type XXVII. Vase with an out-turned featureless rim. Of tolerably fine fabric, it is provided with a red slip. *Variant XXVIIa* is distinguished by a groove on the inner side of the rim. Of tolerably fine fabric, it is provided with a red slip. *Variant XXVIIb* has a thickened rim. Of medium fabric, it preserves a red slip.

Type XXVIII. Vase with a splayed-out inconspicuously-thickened and bevelled rim and a concave neck. Of medium fabric, it bears a red slip. This type is rare and found amidst the débris of the platform of Temple I.

Type XXIX. Vase with a splayed-out featureless rim having a ridge at the base internally, a short neck and a wide squattish profile. Of fairly fine fabric, it preserves a red slip externally and on the uppermost part of the inner side. This type is rare and found amidst the débris of the platform of Temple I.

Type XXX. Vase with an outcurved featureless rim, a constricted neck and a bulging profile. Of fairly fine fabric, it is provided with a red slip, mostly flaked off. *Variant XXXa* differs from the above by its flaring rim with a groove internally. Of fairly fine fabric, it is provided with a red slip. *Variant XXXb* differs from the preceding by its externally-clubbed rim. Of medium fabric and mica-dusted surface of the shoulder, it preserves a red slip.

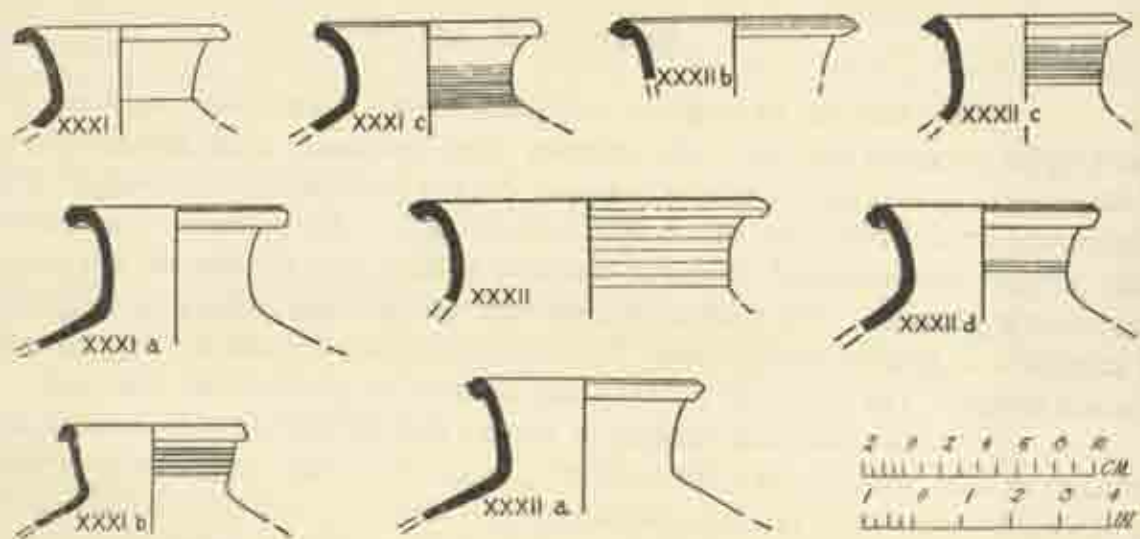


FIG. 36. Kodan: pottery

Type XXXI. Vase with a flaring clubbed rim, a weakly-carinated neck and an expanding shoulder. Of tolerably fine fabric and mica-dusted outer surface of the profile, it preserves a red slip externally and the uppermost part of the inner side. *Variant XXXIa* differs from the above by its grooved rim. Of medium fabric and mica-dusted

outer surface of the profile, it is provided with a red slip externally and the uppermost surface of the inner side. *Variant XXXIb* differs from the main type by its drooping rim and grooved neck. Of tolerably fine fabric, it is provided with a red slip externally and the uppermost surface of the inner side. *Variant XXXIc* differs from the main type by its inconspicuously nail-headed rim and grooved neck. Of tolerably fine fabric, it is provided with a red slip.

Type XXXII. Vase with a flaring externally-bevelled rim and a grooved concave neck. Of medium fabric, it is provided with a red slip externally and on the uppermost part of the inner side. *Variant XXXIIa* differs from the above by its grooved and undercut rim and a weakly-carinated neck without grooves. Of medium fabric, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XXXIIb* differs from the main type by its multi-grooved rim. Of medium fabric, it is provided with a red slip. *Variant XXXIIc* differs from *XXXIIa* by a depression on the bevelled part of the rim and the grooved neck. Of medium fabric, it preserves a red slip externally and on the uppermost part of the inner side. *Variant XXXIId* differs from the main type by its drooping and grooved rim. Of tolerably fine fabric, it is provided with a red slip externally and on the uppermost part of the inner side.

9. CHEMICAL ANALYSIS OF PLASTER AND CONCRETE

By Dr. B. B. Lal

Seven samples of concrete and plaster from Kodan were received in the laboratory for chemical analysis. The samples were processed after random sampling and subjected to quantitative chemical analysis. For the purpose a known weight of each specimen was treated with cold dilute hydrochloric acid. After twenty-four hours the soluble portion was separated from the insoluble residue, and the extract was subjected to gravimetric analysis. The residue in each case was washed, dried and weighed and then subjected to general examination. Carbon dioxide was determined in each case on a separate sample. The results of the chemical analysis are given on the next page.

From the chemical analysis it is seen that all the samples contain a high proportion of lime which ranges from 22.99% to 32.15%, but magnesia is present in traces in five specimens and varies in concentration from 0.37% to 0.62% in the remaining two specimens. All these specimens contained a high proportion of carbon dioxide which ranges from 11.70% to 18.98% except in specimen no. 4 which contains only 3.17% of carbon dioxide. It is, therefore, seen that the specimens represent lime plaster and lime concrete.

On examination, the insoluble residue has been found to consist of clay, coarse sand, gravel and straw. Therefore, it is obvious that lime concrete has been made by using coarse gravel and clay and lime plaster has been made by using coarse sand and

CHEMICAL ANALYSIS OF PLASTER AND CONCRETE

clay. Two samples, no. 4 and no. 5, seem to represent fragments of coloured concrete and plaster. Sample no. 4 has its upper surface painted yellow, and it seems that the surface was coloured with yellow ochre. Sample no. 5 has its upper surface painted in red ochre which was the colouring material used for paintings.

Serial No.	Description	Insoluble (clay, sand & gravel)	Sesqui-oxide ($\text{Fe}_2\text{O}_3 + \text{Al}_2\text{O}_3$)	Lime (CaO)	Magnesia (MgO)	Carbon dioxide (CO_2)	Total
1	2	3	4	5	6	7	8
1.	Sample of plaster from the facing of a temple buried inside a mound with an octagonal temple on the top	50.85	6.20	22.99	0.37	18.79	99.20%
2.	Sample of plaster from the top of the platform of Temple 1	53.69	7.74	27.16	traces	11.70	100.29%
3.	Sample of plaster from the floor of the porch of Temple 1	51.73	8.54	25.18	-do-	14.96	100.41%
4.	Sample of plaster from the floor of the sanctuary of Period II of Temple 1	56.51	9.17	32.15	-do-	3.17	101.00%
5.	Sample of plaster from the buried floor of the sanctuary of Temple 1	47.66	7.02	25.54	0.62	18.98	99.82%
6.	Sample of plaster from the later terrace above the porch of Temple 1	50.91	9.72	26.03	traces	13.72	100.38%
7.	Sample of plaster from the floor of the sanctuary of Temple 2	41.47	12.14	30.19	-do-	15.72	99.52%

V. ANIMAL-REMAINS FROM TILAUURA-KOT AND KODAN

By Bhola Nath

I. INTRODUCTION

THIS report deals with the collection of animal-remains from the excavations of two sites, namely Tilaura-kot and Kodan in the Nepalese Tarai conducted in 1962. The remains from Tilaura-kot are all from Period I, which has been divided into two Phases, viz. A and B (above, p. 14).

The following species are represented in Phase A: *Kachuga tectum* Gray, *Canis familiaris* Linn., *Sus cristatus* Wag., *Cervus unicolor* Kerr., *Bos indicus* Linn., *Bubalus bubalis* Linn. and *Capra hircus aegagrus* Erxl.

The following species are represented in Phase B: *Sus cristatus* Wag., *Muntiacus muntjak* Zimm., *Cervus duvauceli* Cuv., *Bos indicus* Linn., *Capra hircus aegagrus* Erxl. and *Ovis aries dolichura* Duerst.

Lissemys punctata Bonnaterre, *Sus cristatus* Wag., *Cervus unicolor* Kerr., *Bos indicus* Linn., *Bubalus bubalis* Linn. and *Rattus rattus* Linn. are represented in Pit 1 which contained the material of both Phases A and B of Period I.

Bos indicus Linn., the domestic humped cattle of India, is the only species that has been recorded from Kodan. The remains were found inside a well (above, p. 164).

Thus, altogether twelve species are represented in this collection.

In most cases the remains are very fragmentary and fragile in nature. The organic material of bones has disappeared to a great extent and they are impregnated with inorganic materials, thus having become mostly mineralized.

Except a very few long bones, the collection consists of fragments only which are unsuitable for measurements. Two fragmentary bones of *Sus cristatus* Wag. and one of *Cervus unicolor* Kerr. bear definite chopping-marks on them, which shows that the inhabitants probably used these animals as food.

As at Harappa, Mohenjo-daro, Hastināpura and Rangpur,¹ there are

¹ Harappa: B. Prasad, *Animal Remains from Harappa*, Mem. Arch. Surv. Ind., no. 51 (1936); Mohenjo-daro: R. B. S. Sewell and B. S. Guha in J. Marshall, *Mohenjo-daro and the Indus Civilization* (London, 1931), II, pp. 649-73; Hastināpura: Bhola Nath in *Ancient India*, nos. 10 and 11 (1954 and 1955), pp. 107-20; Rangpur: Bhola Nath in *ibid.*, nos. 18 and 19 (1962 and 1963), pp. 153-59.

many bones which belong to young animals, indicating thereby that the people practised full-fledged domestication of these animals.

Altogether one hundred and forty-eight fragments from Tilaura-kot have been examined. Out of them, *Sus cristatus* Wag. comprised sixty-six p.c., *Bos indicus* Linn. twenty-one and the rest thirteen. Thus, it appears that the most favourite animal domesticated by the inhabitants of that site was *Sus cristatus* Wag. and next to it was *Bos indicus* Linn.

Following the usual convention, the name *Sus cristatus* Wag. has been used for the Indian domestic pig, *Bos indicus* Linn. for the Zebu or the domestic humped cattle of India, *Bubalus bubalis* Linn. for the Indian domestic buffalo, *Capra hircus aegagrus* Erxl. for the Indian domestic goat, *Ovis aries dolichura* Duerst for the Indian domestic sheep, and *Canis familiaris* Linn. for the domestic dog.

I wish to express my thanks to the Director, Zoological Survey of India, for the encouragement given during the course of the preparation of this paper.

2. CLASS: REPTILIA

A. ORDER: CHELONIA

(i) Family: *Trionychidae*

Lissemys punctata Bonnaterre (the common soft-shelled box-turtle).

1. Fragment of epiplastron. From Pit 1 of Tilaura-kot.
2. Fragment of epiplastron. From Pit 1 of Tilaura-kot.

The fragments of epiplastron resemble in pattern and vermiculations those of Mohenjo-daro, Harappa and Hastināpura.

The photograph of a well-preserved fragment indicated above is reproduced along with that of one from Harappa (pl. CXIV, 1 and 2).

(ii) Family: *Emydidae*

Kachuga tectum Gray

1. Fragment of a plastron. From Phase A of Period I of Tilaura-kot.

The single fragmentary piece closely resembles those of Harappa and Mohenjo-daro. This species is commonly found in the rivers of the Gangetic plain. Fossils of this species have also been recorded in the Pleistocene of the Siwaliks.

3. CLASS: MAMMALIA

A. ORDER: CARNIVORA

(i) Family: *Canidae*

Canis familiaris Linn. (the domestic dog)

1. Right horizontal ramus of mandible with third and fourth premolars and first molar. From Phase A of Period I of Tilaura-kot. Pl. CXIV, 3 and 4.

2. Fragment of left pelvis. From Phase A of Period I of Tilaura-kot.

The above two fragments of the *Canis familiaris* Linn. do not show any special peculiarities and resemble those of modern domesticated dogs. The mandible shows extreme reduction of teeth on either end of cheek-tooth row which occurs in the extreme cases of domestication in dogs. This particular mandible bears the third and fourth premolars and first molar and a minute second molar tooth-socket, thereby showing reduction of the molar tooth. It indicates that this dog was mainly subsisting on flesh-diet.

B. ORDER: ARTIODACTYLA

(i) Family: *Suidae*

Sus cristatus Wag. (the domestic pig)

One hundred and one fragments belonging to limb-bones, mandibles and maxillae were present; of these forty-seven are from Phase A of Period I, twenty-six fragments from Phase B of the same Period and twenty-eight from Pit 1. These remains are very fragmentary. Some of the better preserved and conspicuous bones such as fragment of the body of mandible, the left lower canine tooth or tusk and the forelimb-bone, viz. humerus, are reproduced here (pl. CXIV, 6, 7 and 8).

A careful examination of the remains of this animal leads us to refer them to the domestic race of Indian pig *Sus cristatus* Wag. The bones, for example the metacarpals and phalanges as well as the limb-bones, are rather small and indicate that they belong to young individuals. And this shows that the people practised full-fledged domestication of this animal. The great frequency in which remains of the *Sus cristatus* Wag. are met with in this collection indicates that the inhabitants probably used to domesticate and maintain large herds of this species, which was the most favourite domesticated animal. The fragments resemble those of the remains from Harappa, Hastināpura, Maski¹ and Rangpur.

¹ Bhola Nath in *Ancient India*, no. 13 (1957), pp. 110-20.

Some of the teeth of this animal are well-preserved. The measurements (in mm.) of the third molars of upper and lower jaws (pl. CXIV, 9 and 10) are given below along with those of Harappa, Hastināpura and the modern specimen in the collection of the Zoological Survey of India.

UPPER THIRD MOLAR	LENGTH	MAXIMUM BREADTH
Tilaura-kot	29	17
Harappa	44	20
Hastināpura	40	18
Modern (Zoological Survey of India)	39	20

LOWER THIRD MOLAR	LENGTH	MAXIMUM BREADTH
Tilaura-kot	34	17
Harappa	42.5	17
Modern (Zoological Survey of India)	37.5	16

The tooth-pattern of the Tilaura-kot specimen is akin to that of Harappa and Hastināpura and of the Zoological Survey collection; but the teeth seem to be slightly smaller due to high degree of domestication, showing thereby that this animal was probably a pet domesticated animal of the inhabitants of that site.

Two fragments bear definite marks of chopping by sharp instruments, indicating that the people probably used this animal for purpose of food.

(ii) *Family: Cervidae*

Muntiacus muntjak Zimm. (the barking deer)

1. Fragment of an antler with a portion of pedicle having burr. From Phase B of Period I of Tilaura-kot. Pl. CXIV, 11.

The fragment of antler of the barking deer has been carefully compared with a modern specimen, and they quite agree with each other. In this particular fragment, the pedicle bears a number of cut-marks showing thereby that the antler was sawn off through the pedicle as well as slightly above the base and removed from the animal after its death. The circumference of this specimen near the base is 87.1 mm., and this indicates that the antler was of a subadult specimen.

EXCAVATIONS AT TILaura-KOT AND KODAN

Cervus unicolor Kerr. (the sambur deer)

1. Left astragalus. From Phase A of Period I of Tilaura-kot. Pl. CXIV, 5.
2. Fragment of cervical vertebra. It bears a chopping-mark. From Phase A of Period I of Tilaura-kot.

3. Right astragalus. From Pit 1 of Tilaura-kot.

The three bones tally with the corresponding ones of *Cervus unicolor* in the collection of the Zoological Survey of India and those from Mohenjo-daro and Rangpur.

The fragment of the cervical vertebra bears definite mark of chopping by some sharp instruments which shows that this animal was probably hunted for food.

Cervus duvauceli Cuv. (the bāraṣiṅgā)

1. Distal fragment of right femur. From Phase B of Period I of Tilaura-kot. This fragment resembles those of the specimens of *Cervus duvauceli* in the collection of the Zoological Survey as well as those from Harappa and Hastināpura.

(iii) Family: Bovidae

Bos indicus Linn. (the domestic humped cattle of India)

1. Third right lower premolar. From Phase A of Period I of Tilaura-kot.
2. First phalanx. From Phase B of Period I of Tilaura-kot.
3. Fragment of right calcaneum. From Phase B of Period I of Tilaura-kot.
4. Distal fragment of right third and fourth metatarsal. From Phase B of Period I of Tilaura-kot.
5. Fragment of right pelvis. From Phase B of Period I of Tilaura-kot.
6. Fragments of ribs. From Phase B of Period I of Tilaura-kot.
7. Distal fragment of left tibia. From Phase B of Period I of Tilaura-kot.
8. Left astragalus. From Pit 1 of Tilaura-kot.
9. Second Phalanx. From Pit 1 of Tilaura-kot.
10. Fragment of rib. From Pit 1 of Tilaura-kot.
11. Left third and fourth metatarsal. From the well of Kodan.
12. Left tibia. From the well of Kodan.
13. Broken right tibia. From the well of Kodan.
14. Right third and fourth metatarsal. From the well of Kodan.
15. Fragment of right calcaneum. From the well of Kodan.
16. Right astragalus. From the well of Kodan.
17. Third phalanx. From the well of Kodan.
18. Two fragments of the body of thoracic vertebra. From the well of Kodan.
19. Left calcaneum. From the well of Kodan.

20. Left astragalus. From the well of Kodan.
21. Left large cuneiform. From the well of Kodan.
22. Right large cuneiform. From the well of Kodan.
23. Left lateral malleolus. From the well of Kodan.
24. Second phalanx. From the well of Kodan.
25. Two first phalanges. From the well of Kodan.
26. Right Naviculo-cuboid bone. From the well of Kodan.
27. Left Naviculo-cuboid bone. From the well of Kodan.

The remains of the humped cattle listed above are mostly fragmentary and are of no use for exact measurements except a very few long bones which are intact and well preserved. A table of the measurements (in mm.) of limb-bones, *viz.* third and fourth metatarsal (pl. CXIV, 12) and tibia (pl. CXIV, 13), is given below for comparison with those of Harappa and the modern specimen.

RIGHT THIRD AND FOURTH METATARSAL	MAXIMUM LENGTH	PROXIMAL DIAMETER	MEDIAN DIAMETER	DISTAL DIAMETER
Kodan	255.5	40.5	27	41
Harappa (short-horned variety)	268	55	32	65
Modern (Zoological Survey of India)	255	45	26	47

TIBIA	MAXIMUM LENGTH	PROXIMAL DIAMETER	MEDIAN DIAMETER	DISTAL DIAMETER
Kodan	344	83	35 (approx.)	42
Harappa (short-horned variety)	—	71	34	—
Modern (Zoological Survey of India)	351	89	37	57

From the above tables it is evident that the limb-bones of Tilaura-kot and Kodan are akin to those of the modern specimens of the domestic cattle now found in India. It is, thus, evident that the Tilaura-kot and Kodan remains are of the same species as that of the domesticated cattle now met with in India.

The remains of the humped cattle from Tilaura-kot and Kodan also closely resemble the smaller humped short-horned variety found at Mohenjo-daro, Hastināpura and Rangpur.

Bubalus bubalis Linn. (the Indian domestic buffalo)

1. Distal fragment of left radius. From Phase A of Period I of Tilaura-kot.
2. Fragment of right calcaneum. From Pit 1 of Tilaura-kot.
3. Second left upper premolar. From Pit 1 of Tilaura-kot.

None of the bones is complete, and no measurements can, therefore, be taken for comparison. However, below are given the measurements (in mm.) of distal end of the left radius along with those of Maski and of a modern specimen for comparison.

DISTAL EPIPHYSEAL END OF LEFT RADIUS	DISTAL EPIPHYSEAL BREADTH	BREADTH OF THE DISTAL ARTICULAR SURFACE
Maski (subadult)	74	70
Tilaura-kot and Kodan	78	72
Modern specimen (Zoological Survey of India)	72	73

The only tooth available resembles those of the modern specimens.

The find of a limited number of fragments of bones of *Bubalus bubalis* Linn. indicates that the inhabitants probably did not maintain large herds of the Indian buffalo as compared with *Bos indicus* Linn. The remains show very close structural resemblance with those of the modern domestic buffalo. Thus, the Nepal remains are closely akin to the modern Indian domesticated race of buffalo. They are also similar to those of Mohenjo-daro, Harappa, Hastināpura and Maski.

(iv) *Subfamily: Caprinae*

Capra hircus aegagrus Erxl. (the domestic goat)

1. Second left upper molar. From Phase A of Period I of Tilaura-kot.
2. Right horizontal ramus of mandible with first to third molars and third premolar. From Phase A of Period I of Tilaura-kot.
3. Fragment of a rib. From Phase B of Period I of Tilaura-kot.

The remains of the goat listed above are very scanty in number as compared with those of other animals and are fragmentary. They closely resemble the modern domesticated species and corresponding remains from Hastināpura, Maski and Rangpur.

The available teeth do not show any specialized peculiarities and generally resemble those of the modern domestic goat. The fragment of the lower jaw is illustrated here (pl. CXIV, 14).

Ovis aries dolichura Duerst (the Indian domestic sheep)

1. Lower left third molar. From Phase B of Period I of Tilaura-kot.
The single find closely resembles the modern domesticated sheep.

C. ORDER: RODENTIA

Family: Muridae

Rattus rattus Linn. (the common house-rat)

1. Incisor tooth (lower). From Pit 1 of Tilaura-kot.
The single find of this animal obtained shows its preserve in the habitational site.

4. EXPLANATION OF PLATE CXIV

Lissemys punctata Bonnaterre

1. Fragment of a epiplastron. From Pit 1 of Tilaura-kot.
2. Left complete and intact epiplastron. From Harappa.

Canis familiaris Linn.

3. Lateral view of the right horizontal ramus of mandible. From Phase A of Period I of Tilaura-kot.
4. Medial view of the same.

Cervus unicolor Kerr.

5. Left astragalus. From Phase A of Period I of Tilaura-kot.

Sus cristatus Wag.

6. Left lower canine tooth or tusk. From Phase A of Period I of Tilaura-kot.
7. Fragment of the body of mandible with four incisors. From Phase A of Period I of Tilaura-kot.
8. Right humerus without proximal end. From Period I of Tilaura-kot.

EXCAVATIONS AT TILAURA-KOT AND KODAN

9. Fragment of an upper jaw with first to third molars. From Period I of Tilaura-kot.

10. Fragment of the left horizontal ramus of a mandible with first to third molars and third and fourth premolars. From Phase A of Period I of Tilaura-kot.

Muntiacus muntjak Zimm.

11. Fragment of an antler with a portion of pedicle having burr. From Phase B of Period I of Tilaura-kot.

Bos indicus Linn.

12. Right third and fourth metatarsal (cannon bone). From the well of Kodan.

13. Left tibia. From the well of Kodan.

Capra hircus aegagrus Erxl.

14. Right horizontal ramus of mandible with first to third molars and third premolar. From Phase A of Period I of Tilaura-kot.

VI. EXPLORATIONS

I. GENERAL OBSERVATIONS

THIRTY-SIX sites (fig. 37), including Tilaura-kot and Kodan, were explored from Lumbini, the starting-point of the exploration, and Ram Ghat, where the party halted for the excavations. Of these sites, fifteen, namely, Saina-Maina, Lumbini, Sisahniya, Siwalwa (Dohni-Mahādeva of P. C. Mukherji), Bijua (Sijuwa of P. C. Mukherji), Sisania, Kodan, Gotihawa, Taulihawa, Tilaura-kot, Araura-kot, Nigali-sagar, Sagrahawa, Bikuli and Chatradi,¹ have already been reported on by P. C. Mukherji. The sphere of the present exploration was limited to the Districts of Bhairhwa and Taulihawa. All the sites, except Patna, Sonagarh, Chaganth, Patharkot, Chatradi and Piprahwa, are located in the tract bounded by the lowest range of the Himalayas on the north, the Banganga on the west and the Dano on the east. Several small streams like the Jamwar, Marthi, Beti, Siswa, Kothi, Koilahawa and Tilar flow through this tract from north to south. Most of these as well as the Banganga and the Dano are unbridged. The southern part of this area is flat and under cultivation, while the northern part is mostly engulfed by forests. There are only three roads—one, a fair-weather unmetalled road, connecting Bhairhwa with Taulihawa *via* Lumbini, the second, also unmetalled, linking Taulihawa with Khunuan on the Indo-Nepalese border and the third, a metalled one, connecting Lumbini with the Nowgarh railway-station of India.

Though the capital-town of Kapilavastu still remains unidentified, the explored tract corresponds to a large part of the country of Kapilavastu as seen by Hiuen Tsang. The antiquities discovered in this region have sufficient correspondence to those of northern India to indicate not merely a close contact but a striking community of ceramic tradition and a common cultural pattern between India and this part of Nepal from the third century B. C. to at least the beginning of the Muslim conquest. In fact, the land did not possess an aspect of exclusiveness.

The erection of pillars by Aśoka (*circa* 273-36 B.C.) in the birth-places of Gautama Buddha and Kanakamuni is an important landmark for the chronology of the early history and archaeology of this land. Sherds of the Northern Black Polished Ware, which has generally been assigned to the sixth-fifth centuries B. C. in the central Gangetic

¹ Spellings of the site-names adopted in this publication are in accordance with those in Survey-sheets. Local pronunciation varies in some cases.

plains, the primary home of this individualistic lustrous Ware, have, no doubt, been found at Tilaúra-kot, Lumbini and Nipania, but in the face of the evidence (pp. 15 and 18) produced by the excavation at Tilaúra-kot, it has not been possible to date it, in the present context, prior to the third century B. C. Seven of the sites, namely, Tilaúra-kot, Lumbini, Nipania, Pipri, Kadzahawa, Lamtiya and Sisania, yielded the grey ware found associated with the Northern Black Polished Ware.

The surface-collections include, apart from pottery and already-noted antiquities of Tilaúra-kot, a good number of terracottas from several sites, Kushan coins from Pipri, Kadzahawa and Sisania, a coin of Satyamitra from Lamtiya, a coin affiliated to the issues of Mānānka of Nepal from Sisania and an issue of 'Alāu'd-Dīn Khaljī from Nipania. This, in view of the hurried explorations,¹ implies the richness of the sites.

On the available evidence, it may be said that the land was rather thickly populated and enjoyed prosperity at least from the Maurya times to the days of the Kushans. The existence of fairly extensive habitation-mounds at Tilaúra-kot, Nipania, Pipri, Kadzahawa, Lamtiya, Ganwari (adjoining Piprahwa, District Basti, India, which yielded the reliquary inscribed in the Maurya Brāhmī characters) and Sisania lends sufficient credence to the statement of Hiuen Tsang that the country of Kapilavastu of his times contained some ten desert ruined cities.

The region was not in a state of affluence during the fifth, sixth and seventh centuries, as is evident not merely from the narratives of Fa-hien and Hiuen Tsang but also from the paucity of archaeological remains. Fa-hien found the city of Kapilavastu 'like a great desert' with neither king nor people. 'The country of Kapilavastu', writes Fa-hien, 'is now a great desert; you seldom meet any people on the roads for fear of the white elephants and the lions. It is impossible to travel negligently'.² At the time of Hiuen Tsang's visit, 'the capital is overthrown and in ruins', the royal precincts have 'been long deserted', 'the peopled villages are few and waste' and 'there is no supreme ruler; each of the town appoints its own ruler'.³

Antiquities definitely ascribable to the Gupta and the immediately post-Gupta periods have not been found at any of the places except Lumbini (pp. 201 and 202) and Dohni (p. 229). Several crudely-executed terracotta figurines, some with outlandish features and a few with hollow cylindrical bodies, have, no doubt, been found at Pipri, Kadzahawa, Bamhni, Sisania and Lamtiya. Their exact chronological position, however, is not yet certain. Similar figurines from Ahichchhatrā have broadly been assigned to *circa* A. D. 450-750.

¹ Due to its late start, the party had to be content with hurried explorations. In the beginning the main concern was to find out a suitable site for excavation. Once the excavation was started the party had hardly any time to concentrate on exploration. Sporadic rains even in the middle of February when the party reached Lumbini, the starting-point, and early appearance of the monsoon since the last week of May stood further in the way, as this rendered cart-tracks through the fields simply unjeepable.

² Samuel Beal, *Buddhist Records of the Western World*, I (London, 1906), p. 1.

³ *Ibid.*, II (London, 1906), p. 14.

The dismal picture given by Fa-hien and Hiuen Tsang evidently gave way to a sunny one in the last quarter of the first millennium A. D., when the land was under a spell of brisk architectural activity. Ample evidence of it comes from the ruins of brick structures from Kodan, Lumbini, Sonagarh, Tilaura-kot, Chatradi, Siwalwa, Bikuli, Chaganth and Saina-Maina. Faced with lavishly-decorated bricks in most cases, these elegant religious structures were built on ambitious scales and reflect a good measure of prosperity. In spite of the easy availability of stone, the builders and craftsmen fell back on clay. Brahmanical religion was in the ascendancy, but Buddhism was not ousted as attested by the finds of Saina-Maina. Lumbini continued to sustain Buddhism with zeal.

Unfortunately, these structures have mostly either disappeared completely or have been reduced to plinths and foundations. The ornamental bricks are the main evidence of the contemporary artist's consummate skill, as the number of stone sculptures and architectural pieces are very few. The same zest and skill are not manifest in other spheres of material culture. The sites are poor not only in objects of daily use but in terracottas and sculptures which is rather enigmatic in view of the exuberant decorations on bricks.¹ Characterized by a monotony of form and fabric, the pottery is a purely red ware industry without any pretensions to aesthetic form and quality. The shapes of earthen vessels are only a few and, presumably, were intended to meet the bare needs of the people of very little means.

This phase of affluence appears to have lasted till the arrival of the Muslims. Glazed sherds from Parora (p. 228) and Sihokhor (p. 227) and a single coin of 'Alāu'd-Dīn Khalji (A. D. 1296-1315) from Nipania are the only discovery of this new impact. A few sherds of the blackish-grey ware collected from Parora and Sihokhor presumably belong to this period.

2. LUMBINI (DISTRICT BHAIKHOVA)

Practically nothing has been done to conserve the monuments of Lumbini (lat. 27° 28' N.; long. 83° 16' 40" E.), which is nearly 34 km. by road from the Nowgarh railway-station of India. The only repairs achieved are the bricking of the banks of the ancient tank (pl. CXV A) and the construction of a high platform around the Māyādevī temple, which look painfully new and glaring against the old work. Indeed, the new utilitarian constructions, like rest-houses and the building of Health Centre, in the vicinity of the monuments and the laying of the road have told heavily on the ancient structures. To

¹ The sites, imperfect though our knowledge be of them, proclaim that the artistic impulses had not dried up. The artist evidently had an adorable place as in the early period of Tilaura-kot, but his hand served only gods. His services were no longer utilised by the common men in their daily life. Why there appeared such a radical change in outlook? Was it entirely due to the intense religiosity of the people? Or, was it due, partly at least, to some changes in social horizon like the morbid reduction of the general mass to a state of extreme poverty?

furnish one instance which the author can personally vouchsafe: a group of sixteen small votive *stūpas*, which she saw in 1957 to the north side of the path leading to the modern stair of the temple of Rummindei, has now completely disappeared. Further, several of the structures, exposed by P. C. Mukherji¹ in 1899, can no longer be traced. The excavation of 1933-34 (Neither any record nor any report of the excavation was, unfortunately, made.), under the patronage of Kaiser Shumsher Jung Bahadur Rana, resulted in the damage of several structures due to the unscientific technic employed in the excavation. Thus, in some cases the ground below the foundation was laid open so that these structures collapsed with the shifting of the earth by the periodical rains. Some of the antiquities (pp. 199-204) found during the excavation are now dumped in the kitchen of the Buddhist monk of Lumbini Dharmodaya Committee who lives in the old rest-house and has no knowledge about their exact find-spots. The exposed brick monuments are being denuded every year not only by rains which melt the mud-mortar but also by the people collecting here who make temporary ovens by robbing the structures (pl. CXV B) of their bricks. During her stay in February 1962 the author noticed not less than a dozen of such ovens being made every day for *kaḍhā chāpānā*.

The most interesting piece of antiquity at Lumbini is of course the pillar (pl. CXVI A) of Aśoka. Made of the Chunar sandstone with tiny blackish specks, it bears the characteristic Maurya polish. The pillar has a vertical fissure down to the middle, and its top is broken off probably by lightning, as noted by Hiuen Tsang. A stone cap has been provided at the top to prevent the percolation of water. The height of the extant part, above the rough hammer-dressed surface (pl. CXVI B) meant to be buried below ground, is 7.391 m. The lower portion of the pillar to a depth of 2.134 m. (which is polished and below which was encountered the hammer-dressed portion² meant to be embedded) remains buried below the ground. The three successive brick enclosures mentioned by P. C. Mukherji no longer exist on the west side (where the author sank a shaft to examine the base) which had been disturbed by the excavation of 1933-34. The crowning elements, except the bell-shaped lotus-member (in two halves) which now lies on the paved platform in front of the Rummindei temple, are now missing.

Both to the immediate north-east and south-east of the pillar is a small brick *stūpa* with a square base, while to its south-west is a *triratha* brick plinth of moderate dimensions. These three structures are much later than the pillar of Aśoka. To the north-west of the pillar is a damaged cell-like structure.

A few metres to the east of the pillar is a modern flat-roofed temple, around which is a high, spacious and paved platform approached from the east by a long stair-

¹ *Op. cit.*, pp. 34-39.

² Though the author wanted to reach the bottom of the pillar to know the height of the hammer-dressed portion and the contrivance, if any, for the insertion of the pillar, she could not go beyond 51 cm. below the polished portion due to the intervention of the Commissioner (on tour) who was apprehensive of the fall of the pillar in the operations.

case, also of modern construction. Inside the temple is enshrined a fragmentary sculpture, variously known as Rūpādei (Rūpādevī) and Rummindei (Rummindevī), the tutelary goddess of Lumbini. It presents, in high relief, the nativity of Buddha (pl. CXVII). Māyādevī, nearly life-sized, stands under a tree grasping its branch with her right hand, her left hand resting on her hip. On her right side and supporting her is a woman, presumably her sister Mahāprajāpati. Beyond the latter is the slightly-bent figure of Śakra, with a high crown, who is in the attitude of receiving the new-born child, as the latter emerges from his mother's right side. Below, between Śakra and Māyādevī, is the defaced figure of standing Gautama with a halo round his head. Just behind Śakra is a male figure. Stylistically ascribable to the Gupta period, the sculpture is badly damaged. In the wall to which this sculpture has been fixed are also attached, besides a modern sculpture (pl. CXVIII A) with the nativity of Buddha, a few fragmentary slabs (pl. CXVIII B), of which one represents the lower portion of a seated image in *paryāṅkāśana*.

The modern temple and the platform are built over the ruins of several subsidiary structures, including *stūpas*, and the magnificently-decorated plinth of an early temple unearthed by P. C. Mukherji. The old temple consisted of a brick sanctuary and an oblong antechamber facing east and enshrined the nativity scene now present in the modern temple. The plinth of the sanctuary was the most exquisite of its kind. *Saptaratha* on plan excluding the minor projections, it was relieved with several horizontal mouldings, each again richly embellished with a variety of motifs. This plinth and the *stūpas* excavated by P. C. Mukherji in the immediate vicinity of the temple are no longer visible, as they are engulfed by the wall of the present paved platform.

The site of the old temple, presumably, marks the spot where Gautama was born. It is likely that the stone enclosure of Aśoka lies buried below either the plinth of this very temple or the ruins of a still earlier temple. An oblong enclosure with a central structure lies partially buried below the long staircase of the modern temple. The enclosure appears to have been built over a ruined earlier structure.

To the south of the temple is a tank, the banks of which have recently been veneered with bricks in terraces. This tank, doubtless, represents the bathing-tank of the Śākyas mentioned by Hiuen Tsang.

On the east bank of the tank are many ruined brick structures, most of which are bases of small brick *stūpas*. Six of these *stūpas* stand in a row in the east-west alignment beyond the north-eastern corner of the tank. Below these structures there exist earlier foundations.

Near the south-east corner of the tank is a quadrangular brick monastery with an array of cells on four sides. Its eastern wing has disappeared. The partition-walls of the cells of the north and south wings are reduced to a few courses. The walls of the cells of these two wings are overhanging in some places and floors have been removed. The central two cells (second and third from the north) of the west wing were not fully dug earlier, so that the author found (after removing earth to a depth of 30 cm.) their

tolerably intact floors, made of large bricks (35.5 × 20.3 cm.). Above the ruins of this monastery are scanty traces of a structure representing possibly a later monastery, the latter affected irredeemably due to excavation and denudation. Attached to the north-western corner of the monastery are at least two cells.

To the east-south-east of the staircase of the modern temple is a plinth, probably of a shrine, standing to a height of 1.83 m. and built of bricks of large dimensions. It has a central projection on each of its four sides; the projection on the west side is conspicuously larger and might have contained the steps leading to the top.

A group of sixteen votive *stūpas* of bricks existed till 1957 to the north side of the path leading to the east staircase of the modern temple of Rummindei. To the north of the latter are three small *stūpas*, each with a square base. Below the middle *stūpa* is an earlier structure.

Besides these structures, which were exposed partly in 1899 and partly in 1933-34,¹ there are others yet to be exposed. Indeed, the ruins extend eastward to the bank of the Tilar.

The following is a catalogue of the antiquities unearthed in 1933-34 and shown to the author by the monk of the Lumbini Dharmodaya Committee.

Stone figures

1. Head of Buddha with a plain bump-like *ushnīṣa*, smiling face, circular mark (*ūrṇā*) on the forehead and open eyes. Made of mottled red sandstone, it, evidently, came from the *atelier* of Mathura. Stylistically it is ascribable to the Kushan period. 7.5 cm. high, maximum width being 5 cm.² Pl. CXIX A.

2. Buddha, in *bhūmi-sparśa-mudrā*, rigidly seated in *vajra-paryāṅkāśana* on a badly-defaced *viśva-padma* below the *Bodhi* tree. A portion of the head and the dexter top corner of the back-slab are missing. Chlorite (?). 17 cm. high and 12 cm. wide. Pl. CXIX B, 2.

3. Fragment of a slab, evidently representing the Miracle of Śrāvastī. The lower portion of the central figure of Buddha, in *bhūmi-sparśa-mudrā*, seated in *vajra-paryāṅkāśana* on a fully-blossomed lotus is alone preserved. The lotus is supported by two badly-defaced figures, of which the dexter one definitely represents a hooded *nāga*. Beyond the figure rise up lotus-stalks which presumably supported other figures of Buddha. Chlorite (?). 11.5 cm. high. Pl. CXX A, 1.

4. Fragmentary slab depicting the Eight Great Miracles. The main figure of Buddha is seated in *vajra-paryāṅkāśana* on a double-petalled lotus, its damaged right

¹ The two conspicuously large *stūpa*-like mounds with a small brick tower on the crown are made in 1934 with the excavated rubbish. Many of the pilgrims circumambulate them under the false impression of their being *stūpas*.

² In *Indian Archaeology 1961-62—A Review* (New Delhi, 1964), p. 74 and pl. CXXVIII D, the find-spot of this sculpture is wrongly given as Tilaura-kot.

hand being in *bhūmī-sparśa-mudrā*. It is clad in a *dhotī* and a scarf, the latter, with ends tucked on the left shoulder, leaves its right chest and shoulder bare. The head along with the upper portion of the back-slab is missing. Around this figure are represented the seven other great incidents of Buddha's life, of which the birth and the first sermon are alone preserved on the dexter and the offering of honey on the sinister. In the birth-scene Buddha is seen issuing from the right side of his mother who holds with her right hand the branch of an *aśoka* (?) tree, her left hand resting on her hip. Above the birth-scene Buddha is seated in *vajra-paryāṅkāśana* on a *viśva-padma*, his hands being in *dharma-chakra-pravartana-mudrā*. In the scene representing the presentation of honey, the monkey is absent, and Buddha is seen seated in *bhadrāsana* with a bowl held in his hands. Greyish sandstone (?). 18 cm. high and 17.5 cm. wide. Pl. CXX B, 1.

5. A rather crudely-executed figure of Maitreya seated in *lalitāsana* on a rough seat. Its right knee is tied by a band with the waist. Decked in a *hāra* and a *jaṭā-mukuṭa*, the latter possibly having a *stūpa*, the Bodhisattva displays *vyākhyāna-mudrā*. Through his left arm-pit passes the branch of a *nāgakeśara* with three leaves and a flower. There is a second branch with four leaves and a *nāgakeśara* flower on the right side. The oblong back-slab is plain. Greyish sandstone (?). 22 cm. high and 14 cm. wide. Pl. CXIX B, 1.

6. A beautiful image of a two-armed Bodhisattva seated in *lalitāsana*, with the pendant left foot resting on a lotus, on an artistically-executed *viśva-padma*, the latter placed on a two-tiered pedestal. Draped in a long *dhotī* and a diaphanous scarf worn in an *upavīti* fashion and decked in a girdle, an *upavīta* of two strands and a high *jaṭā-mukuṭa* (central part damaged), the Bodhisattva, with half-closed eyes, graceful flexion, sensitively-modelled limbs and gracious facial expression, displays *vyākhyāna-mudrā*. From his left arm-pit passes the stalk of a flower. A similar stalk, with the flower broken, passes through his right arm-pit as well. The identification of the flower would have helped in the identification of the deity who displays the *mudrā* of Mañjuśrī and Maitreya. The dexter corner of the back-slab, which is rounded on the top and has a row of petals around the edge, is broken. Stylistically, the image is ascribable to the eighth-ninth century A. D. Buff-coloured stone (soapstone ?). 7 cm. high and 4.8 cm. wide. Pl. CXXI.

7. Top fragment of a sculpture representing perhaps Lokeśvara. It preserves the head of the Bodhisattva and a full-blossomed lotus, the stalk of which is, evidently, held in his left hand. A tiny image of Amitābha occurs on the high *jaṭā-mukuṭa*, the latter having a fan-shaped projection (fillet-end ?) on either side. On either side of the head is a *stūpa*, the one on the dexter being larger. The back-slab is inconspicuously pointed at the crown. Stylistically ascribable to the tenth century A. D. Greenish black stone. 8 cm. high and 14.2 cm. wide. Pl. CXXII A, 2.

8. Head of a Bodhisattva, with half-closed eyes, of fairly neat workmanship. At the base of the high *jaṭā-mukuṭa* is a short crown with an ornate triangular piece at

each side and the effigy of a Dhyāni-Buddha with his right hand possibly in *vara-mudrā* (Ratnasambhava?) in the centre. Blackish stone. 12 cm. high. Pl. CXXII A, 1.

9. Fragment of a sculpture with head alone in high relief preserved. The hair is tucked on the crown in three knots arranged together. The facial expression is contemplative. Bluish basalt (?). 13.5 cm. high. Pl. CXX A, 2.

10. Torso of a figure with an *upavīta*, a necklace and a *hāra*. Sandstone (?). 8 cm. high. Pl. CXXII B, 1.

11. Lower portion of a sculpture with a goddess (upper portion missing) seated in the lap of a god. Of rather crude workmanship, it is defaced. Sandstone (?). 14 cm. high and 14.5 cm. wide. Pl. CXX B, 2.

12. Plaque relieved with the two-armed figure of Gaṇeśa seated in *mahārājalīlā*. The left hand carries a bowl of *laddukas* on which the trunk rests. The top corners of the oblong plaque are slightly rounded. Soft stone. 9.5 cm. high and 7 cm. wide. Pl. CXXII B, 2.

13. A tiny plaque relieved with a two-armed figure of Gaṇeśa. The trunk is turned towards his left hand. The top corners of the plaque are rounded. Of extremely crude workmanship. Soft stone. 4.7 cm. high and 2.7 cm. wide. Pl. CXXIII A, 4.

14. Dancing Gaṇeśa in several fragments.

15. Relief of Gaṇeśa.

16. Plaque crudely relieved with a female, standing in *sama-pāda*, with her left hand resting on the head of a kneeling figure (?) and right hand in *abhaya-mudrā*. Steatite. 10.2 cm. high and 5.7 cm. wide. Pl. CXXIII A, 1.

17. A damaged plaque with the crude relief of a standing figure. Soft stone. 10.5 cm. high and 6.5 cm. wide. Pl. CXXIII A, 2.

18. An oblong plaque with a triangular top containing an extremely crude relief of two females standing in *sama-pāda*. A pot (?) is being supported by the left hand of the dexter female and the right hand of the sinister one. Soapstone (?). 7.3 cm. high and 3.8 cm. wide. Pl. CXXIII A, 3.

Terracotta figures

1. Fragment of an architectural member with the head of Buddha. The body of Buddha is missing. Around the head is a plain halo, round above but possibly elliptical at the bottom. The lips are full as in the Gupta tradition; the open eyes, prominently-arched eye-brows and stylized *dakṣiṇāvarta* curls covering his head and *uṣṇīṣa*, however, point to the piece being datable to about the seventh century A. D. The rim of the portion beyond the halo is relieved with oblique double lines having a row of triangular or nail-shaped incisions within. 13 cm. high. This piece along with no. 13 implies the former existence of an ornate brick structure, the plinth of which was, presumably, embellished with these panels. It may further be presumed, on the evidence of Temple 3 of Nālandā

and Kachchī-kuṭī of Śrāvastī, that these plaques were inserted into the sunken panels between two sets of mouldings. Pl. CXXIII B.

2. Head of an old man with a prominent nose. The head is very individualistic and speaks highly of the skill of the sculptor. Husks have been mixed with the clay before firing. 13 cm. high. Pl. CXXIV A, 1.

3. Head with spiral curls, open eyes displaying pupils and a partly open mouth showing the upper row of teeth. In the matrix a large quantity of rice-husks has been mixed. The surface was coloured in chocolate-red. Stylistically ascribable to the Gupta period. 15.5 cm. high. Pl. CXXIV A, 2.

4. A fine head with half-closed meditative eyes and a peculiar crown. The modelling is reminiscent of the Gupta style. 12 cm. high. Pl. CXXIV B, 1.

5. A defaced head, possibly of a woman, of fairly good workmanship. 10 cm. high. Pl. CXXIV B, 2.

6. A defaced but well-modelled head perhaps with a top-knot. 9.5 cm. high. Pl. CXXIV B, 3.

7. Fragment of a beautifully-modelled head with half-closed eyes and meditative expression. 8 cm. high. Pl. CXXV A, 1.

8. Laughing face with open eyes and a mark, in the form of a circlet, on the forehead. Back portion of the head is hollow. 8 cm. high. Pl. CXXV A, 2.

9. A defaced head of good workmanship and modelling. 9 cm. high. Pl. CXXV A, 3.

10. An individualistic head (bearded ?) with hair, indicated by incised lines, turned backward. 7 cm. high. Pl. CXXV A, 4.

11. Bust of a female with a necklace in the form of a row of impressed roundels. 14 cm. high. Pl. CXXV B, 1.

12. Lower part of a figure wearing a frilled skirt or *antarvāsaka* and scarf or *saṅghātī*. One of its legs is bent and placed behind the other, the latter stretched. It evidently formed part of a scene which had embellished a structure. 17 cm. high. Pl. CXXV B, 2.

13. A large tile with a wide border around. It depicts a scene in which two kneeling figures (lower portion extant) are in front of a foot (possibly of Buddha). It apparently was meant for the decoration of a structure. 52 cm. long and 10 cm. thick. Pl. CXXVI A.

14. Upper portion of a solid crude figurine with disproportionately large eyes, a circular mark on the forehead, fan-shaped coiffure projecting at the crown and an applied *hāra* with incised oblique lines. The back side is flat. Crudely executed, it is analogous to some figurines of Kadzahawa (p.213, pl. CXXXV B, 5). 13 cm. high. Pl. CXXVI B, 1.

15. Solid head with a flat back side, hair arranged in the form of three knobs and large open eyes. Crudely executed. 14 cm. high. Pl. CXXVI B, 2.

16. A leaf-shaped plaque impressed with the figure of Bodhisattva (Mañjuśrī ?) seated in *mahārājatīlā* on a double-petalled lotus. The figure carries in its right hand a long sword, the left hand leaning downward towards a lotus. The hair appears to be in three locks (or crown in three triangular pieces). The head is considerably defaced. On the dexter of the head is a *stūpa* with a square base. The Buddhist creed, in characters of about the eighth or ninth century A. D., is in three lines on the dexter and in one line on the sinister of the figure. 9.5 cm. high. Pl. CXXVII.

Bronze figures

1. Bodhisattva, clad in a *dhotī* worn without *kachchhā* and a folded scarf tied round his waist diagonally. Bejewelled in a double bangle, a plain *hāra*, *kūṇḍalas*, a waist-band and a short *mukūṭa* with a triangular piece which may be part of the turban, the figure stands with its head slightly tilted to his left. In its right hand is the stalk of a fully-blossomed lotus. If the longish object, with its both ends in the form of prongs, in the left hand is a *vajra*, the figure bears the attributes of both Padmapāṇi and Vajrapāṇi. The back side of this solid figure is concave. The figure appears to be of the late Kushan period, 11 cm. high. Pl. CXXVIII, 2.

2. Figure of a devotee or donor contemporary with the preceding. Clad in a *dhotī* (without *kachchhā*) held by a girdle and a folded scarf around the thigh and decked like the preceding, it stands in *ābhaṅga* with folded hands. The back side of this figure, also solid, is concave. 8 cm. high. Pl. CXXVIII, 1.

Coin

A single copper coin was shown to the author. It is badly defaced but it is certainly a Kushan issue. On the obverse is the king to left with a long coat. With his left hand raised, he offers something on an altar with his right hand. The standing deity on the reverse is too defaced to be identified correctly. The diameter of the coin is 2.5 cm., the thickness being .3 cm.¹ Pl. CXXIX A, 7.

Beads

Of the five beads (pl. CXXIX A, 1-5), one, long and barrel-shaped, is of semiprecious stone (pl. CXXIX A, 5), while the rest are of terracotta simulating the shape of an areca-nut.²

¹ Surendra Singh, Pleader of Taulihawa, showed the author two coins which he claims to have collected from Lumbini. One is a round copper coin with a four-spoked wheel and the other is a squarish uninscribed cast copper coin preserving on the obverse an elephant (?) in front of an indistinct object and on the reverse a three-arched symbol, a hollow *svastika* and a tree within railing.

² In the collection of Surendra Singh there are, besides segmented glass beads, several beads of agate, carnelian, onyx and crystal-quartz.

Ear-stud

There is only one specimen of ear-stud. Made of jasper, it is a short cylinder (pl. CXXIX A, 6).

Dabbers

The number of terracotta dabbers is only four (pl. CXXX A), three with a central round socket.

Decorated bricks and tiles

The collection of ornamental bricks (pl. CXXX B and C) and tiles is fairly rich. Decorated with a variety of designs like lotus-petals, *chaitya*-windows, grids, floral and plant motifs and stepped patterns, many of them bear affinity with the ornamental bricks of Kodan.

From the evidence of the monuments and the antiquities, it is apparent that the Buddhist establishment of Lumbini maintained its existence at least from the third century B. C. to the tenth century A. D. The discovery of small plaques, with the reliefs of Brahmanical deities, which are generally assigned to the twelfth and thirteenth centuries A. D., is a pointer to Brahmanism gaining ground in that period. Whether Brahmanism completely ousted Buddhism or co-existed side by side cannot be determined in the present stage of our knowledge.

The ancient occupational deposit around the Buddhist monuments, though not high, is sufficiently extensive. The sherds picked up on the surface are mostly of the red ware and limitedly of the grey ware. Apart from these, there are a few bits of the Northern Black Polished Ware. The shapes of the collected pottery hardly go beyond the types known from Tilaura-kot and Kodan. The fabric and slip, too, correspond to those of the ceramic industries of these two sites. Essentially utilitarian, the pottery is for the most part plain. Of the decorations, only mesh-like impressions and bands in red are available on a few sherds.

The pottery represents *Types IV, XI, XIb, XIVh, XIVk, XXIII, XXIV, XXVb, XXVf, XXVII, XXVIIIc, XXVIIIe, XXX, XXXVb, XL, XLVIII, XLIXd, L, Lf, Lla, LII, LV, LVII, LVIII, LIX, LXXIVa, LXXVI, LXXVII, LXXXIc, LXXXIg, LXXXII, C, CIIa, CIX, CXI, CXVIII, CXIX, CXXI, CXXIIIb, CXXIIIc, CXXIIId, CXXIIIe, CXLIV, CXLVII, CXLIXd, CLIVj and CLXVa* (some with minor variations) from Period I of Tilaura-kot, *Types II, V, VII, VIIa, XIIa, XV, XVIIIa, XVIIIb, XIX and XIXb* from the miscellaneous pottery of Tilaura-kot, *Types I, XI, XVIII, XIXc, XXII, XXVI and XXXI* from Kodan, *Type X* from Period III of Hastināpura and *Ib, If, XIV, XVa and XVI* from Period IV of Hastināpura. The sherds also include, apart from a lamp of

the red ware, a fine bowl (or basin) of the grey ware with a narrowing externally-bevelled rim, a globular profile and a long channel-like lip which starts abruptly from the vessel and a bowl of very fine fabric and thin section with a vertical featureless rim. The latter is distinguished by an almost shiny surface, black interior and brownish-red exterior.

Other surface-finds, besides two fragmentary mullers with circular cross-section, comprise: (i) a dagger-shaped pendant of agate (pl. CXXIX B, 9); (ii) a carnelian ellipsoidal bead of circular section (pl. CXXIX B, 6); (iii) an agate bead in the form of a long cylinder with a circular section (pl. CXXIX B, 8); (iv) a terracotta spheroid bead of black colour (pl. CXXIX B, 5); (v) a terracotta spheroid bead of red colour (pl. CXXIX B, 7); (vi) a vase-shaped terracotta bead with a collared rim and a globular profile (pl. CXXIX B, 11); (vii) a fragment of a polished flat disc of agate with a bevelled edge (pl. CXXIX B, 3); (viii) a fragment of a bronze bowl with a vertical externally-beaded rim, the extant portion of the body being vertical (pl. CXXIX B, 10); (ix) a damaged crudely-executed terracotta head with a tenon below neck, projecting large perforated ears, hair, marked by incised lines, extending horizontally, a crown on the extremely narrow forehead, a torque made of applied discs and missing eyes and lips which appear to have been applied ones (pl. CXXIX B, 2); (x) a damaged tiny terracotta plaque relieved with a male figure having hanging hands (pl. CXXIX B, 12); (xi) a terracotta disc (pl. CXXIX B, 4); (xii) a fragment of a squarish stone slab incised with a central circle having four sets of three petals and a double wavy line in between the sets around the periphery of the circle (pl. CXXIX B, 1); (xiii) a plain terracotta flesh-rubber in the form of an elongated truncated pyramid; (xiv) fragments of iron nails; and (xv) small bits of a bronze object. The find of smelting-refuse points to the practice of casting at the site.

3. NIPANIA (DISTRICT BHAIRHWA)

Immediately to the south-west of Amahwa and to the east of Nipania, which is 7.3 km. to the south-south-west of Lumbini, is a low flattish mound, locally called Sikrawa, within the *mauza* of Nipania (lat. 27° 24' N. ; long. 83° 15' 40" E.), on the west bank of the Nepalese Dano river. The mound (pl. CXXXI A), which is under active cultivation, has considerably been cut away by the river. At the time of the visit of the party the top of the mound was found overgrown with *arhad* plants, but the eroded sections (pl. CXXXI B) close to the river were oozing with sherds. Sherds of the grey ware were picked up in abundance from this area. Though the local people of Amahwa reported the discovery of coins after periodical rains, they could not be induced to produce them. Many beads of semiprecious minerals were found in the possession of the villagers who also reported the existence of ring-wells that are now covered by earth.

The site is rich in pottery. The ancient settlement of the site can at least be traced back to the period of the Northern Black Polished Ware. Picked up from the surface is a coin (pl. CXXXII A, 8) of 'Alāu'd-Dīn Khaljī (A. D. 1296-1315) of the Khaljī

dynasty which possibly indicates the approximate period at least up to which the site was under occupation, if with a break.

Apart from the red ware and a few small sherds of the black-and-red (?) ware, there are three distinct wares, namely, the grey ware, the Northern Black Polished Ware and the fine grey ware with a smooth black slip reminiscent of the Northern Black Polished Ware but lacking the latter's lustrous finish. Of the sherds of very fine fabric and thin section, one is distinguished by a bright brownish-red slip. Surface-pottery corresponds sufficiently to the excavated ceramic types of Tilaura-kot. Indeed, the two sites appear to have been culturally knitted together at least from the Maurya times.

The Northern Black Polished Ware includes two deep bowls, with a conspicuously corrugated body, which recall similar sherds from Patna and Rajghat.¹ The larger of the two, with a vertical featureless rim, presents the corrugations on the inner side as well. The smaller one has a slightly out-turned featureless rim.

Dishes and bowls are the dominant forms in the black polished ware. Shapes of dishes represent *Types I, Ic, Id, Ie, III, IIIb, IV, Va, Vh, Vi, VI* and *VII* from Period I of Tilaura-kot. Particularity noteworthy among bowls is a bowl-cum-lid, with an almost vertical featureless rim having a flange below, which is analogous to *Type 34* from Period II of Rajgir.² Other shapes of bowls are similar to *Types XIIe, XIIIh, XXVII, XXVIIa, XXVIIe, XXVIIIf, XXX* and *XXXIVc* from Period I of Tilaura-kot. Lids include no. 2 of the Northern Black Polished Ware from Tilaura-kot and *Types LXVI* and *LXVIa* from Period I of Tilaura-kot. A single miniature *ghata*, analogous to *Type XCVIII* from Period I of Tilaura-kot, is represented in this ware.

The grey ware, similar to that of Tilaura-kot, occurs in an appreciable proportion, the common forms being dishes and bowls. Some of the sherds are black-and-grey, the black being confined to the interior and the base. In dishes *Types I, Id, II, Ie, IIIa, IV, IVa, V, Va, Vf, VI, VIa, VIIIb* and *IX* from Period I of Tilaura-kot are represented, while bowls present *Types XIIf, XIIIh, XIII, XIVc, XXIV, XXVII, XXVIIId* and *XXX* from the same context. Other forms are rare and include basins similar to *Types XLVII, XLVIIa, XLIXc, Lf, LI* and *LVIII* from Period I of Tilaura-kot and miniature *ghatas* resembling *Types XCVI* and *XCVIII* also from Period I of Tilaura-kot.

The red ware appears to have been the predominating industry. It has a great similarity, in shape, fabric and slip, with that of Tilaura-kot. A few sherds bear designs like mesh-like impressions, finger-nail incisions, incised oblique strokes and applied band with crescent-shaped and pinched decorations made by fingers. Vases outnumber other forms in both number and shapes, basins being the next in order of frequency. Dishes are extremely scarce and present only *Types IV, V* and *Vb* from Period I of Tilaura-kot. Bowls are also not many in number and limited to *Types XIIf, XIVk, XVIIa, XXVIII, XXVIIIc, XXVIIId, XXIXe* and *XXXVIa* from Period I of Tilaura-kot. The basins

¹ *Ancient India*, no. 1 (1946), p. 56, fig. 10, nos. XI and XII.

² *Ancient India*, no. 7 (1951), p. 77 and fig. 5.

include *Types XLIII, XLV, XLVb, XLVc, XLVd, XLVe, XLVIII, XLIXc, La, Lb, LI, LIa, LIB, LII, LVII and LVIII* from Period I of Tilaura-kot and *XXVIIIb* from Period III of Hastināpura. Lids represent *Types LXI, LXIIb, LXIII, LXVII, LXX, LXXVc, LXXVd, LXXVII, LXXVIIa, LXXVIII, LXXVIIIa, LXXXI and LXXXIc* from Period I of Tilaura-kot, *Type XIV* from Period IV of Hastināpura, *Type II* from the miscellaneous pottery of Tilaura-kot, *Type VIa* from Kodan and 29f from Arikamedu.¹ *Type LXXXVII* from Period I of Tilaura-kot is alone represented by tumbler-like vessels. *Types XCVII, CVIIIb and CLXd* from Period I of Tilaura-kot are available with miniature vases and *ghaṭas*. Cooking-pans include *Type XXIa* from Period III of Hastināpura and *Type CXIII* from Period I of Tilaura-kot, the latter with a globular bowl-like profile and a narrowing featureless rim. Vases represent *Types CXVIII, CXVIIIb, CXVIIIc, CXXII, CXXIIa, CXXIII, CXXIIIb, CXXV, CXXVf, CXXVh, CXXVi, CXXVIIb, CXXVIIc, CXXVIIIa, CXXIX, CXXXII, CXXXIIa, CXXXIIb, CXXXIII, CXXXIIIa, CXXXIV, CXLb, CXLIII, CXLIIIa, CXLIIIb, CXLIIIc, CXLIIId, CXLIIIh, CXLIV, CXLIX, CXLIXa, CLII, CLIIa, CLIIb, CLIIc, CLIII* with all its variants, *CLIV, CLIVb, CLVIa, CLVIc, CLVII, CLVIII, CLXVI* with all its variants and *CLXVIIa* from Period I of Tilaura-kot, *Types V, VIIa, XIa, XIII, XIIIc, XVII, XVIII, XVIIIa and XVIIIb* from the miscellaneous pottery of Tilaura-kot and *Types XI, XIIb, XIIc, XVIIIb, XVIIIc, XIXb, XXV, XXVb, XXVc and XXX* from Kodan. Fragments of spouted vases number only two, of which the spout of one is shaped like the trunk of an elephant or a *makara*.

A few sherds have a resemblance with the pottery of Piprahwa (p. 226) on the other bank of the Dano and appear to be later than the pottery of Kodan.

The site yielded only one copper coin (pl. CXXXII A, 8), 1.6 cm. in maximum diameter and 2.66 gm. in weight. The legend on the obverse comprises honorific and regal titles, [a's-] *Sultān* [u'l-A'-] *zam 'Alāu'* [d-] *Dunyā wa'd-Dīn*, while that on the reverse his name *Muhammad Shāh* within a double circle in the centre, and the Nāgarī legend, damaged and cut off, running around it. The Nāgarī legend must have contained *śrī sultān Alāyadīn* and the date seven hundred and odd (A. H.) in figure.

Apart from the coin there are fifteen antiquities collected from the surface. Two of them are fragments of the arms of crudely-executed terracotta human figurines. Animal figurines, all in red terracotta, are four—one leg of an elephant, the second trunk of an elephant or leg, the third torso of a bull (pl. CXXXII B, 1) and the fourth torso of an unidentified animal (pl. CXXXII B, 3). Of a single specimen is a terracotta red spheroid with a deep central groove (pl. CXXXII B, 5) and a red slip, probably used as a net-sinker or loom-weight. Also of one specimen is a disc made of a potsherd of the red ware. Beads number four. Three of them are of terracotta—one spheroid in black (pl. CXXXII B, 7), the second vase-shaped with a collared rim and a globular profile in red (pl. CXXXII B, 4) and the third in the form of an areca-nut in black (pl. CXXXII B, 2). The fourth

¹ *Ancient India*, no. 2 (1946), p. 65.

(pl. CXXXII B, 6) is the fragment of a long barrel circular bead in agate with wavy bands in black and white. The remaining three objects are glass bangles: one, translucent blackish brown, is triangular in section, while two, black opaque, are band-like with a flange at either end of the front side, the central part being concave (pl. CXXXII B, 8).

From the find of iron-slugs and vitreous smelting-refuse, it may be presumed that casting of metal objects and manufacture of glass and glazed objects used to have been practised at the site.

4. PIPRI (DISTRICT TAULIHAWA)

About 3 km. south-west of Taulihawa, 1.5 km. west of Kodan, 400 m. north of Gotihawa and nearly 400 m. south of Pipri (lat. $27^{\circ} 32' N.$; long. $83^{\circ} 1' 30'' E.$) is a low flattish mound (locally called *kot* of Pipri), through which passes a track leading to the village. Rising gradually from the surrounding fields to a maximum height of about 2 m., it is nearly 183 m. (east-west) \times 153 m. (north-south). The surface indicates the existence of brick structures underneath. The area on the west side of the track is said to have contained a number of brick-lined wells now filled in with earth. The location of one such well is shown to the author by the local people: the bricks of this particular well have recently been utilized in a modern well by the side of the track. The site is greatly denuded, but its antiquity is assured not only by the pottery but also by small antiquities, collected from the surface. The ancient town represented by the mound had been in existence when Aśoka erected the pillar in the adjoining village of the present Gotihawa. The mound, with its high antiquity and close proximity to the Aśokan pillar which was erected in front of the *stūpa* of Kanakamuni (p. 229) or Krakuchchhanda, presumably represents the natal town of either of these two Mānushi-Buddhas mentioned by Fa-hien and Hiuen Tsang.

The pottery is both of the red ware and of the grey ware. The collected sherds are for the most part closely analogous to the pottery of Tilaura-kot and Kodan.

Some of the sherds of the grey ware are black-and-grey. The common vessels in this ware are dishes, often with a black slip, which present *Types Ib, IIb, IIc, IIe, IV, V, VI, VIc, and VII* from Period I of Tilaura-kot. Bowls include *Types XI, XXVI, XXVII, XXXIa* and *XXXVI* from Period I of Tilaura-kot. The basin is represented by a single specimen resembling *Type XLV* from Period I of Tilaura-kot.

The only decorations found in the red ware are mesh-like impressions and triangular notches. The dish-form is absent in the red ware. There are many fragments of bowls, but the shapes represented are limited to *Types XXVIIIb, XXVIIIc* and *XXVIIIe* from Period I of Tilaura-kot and *Types Ib* and *Id* from Period IV of Hastināpura. Basins are represented by *Types XLV, XLVI, XLVII, La Ld, Le, LVII* and *LVIII* from Period I of Tilaura-kot. Lids include *Types LXII*, a variety of *LXIII*, a hollow variety of *LXXIII* (also perforated), *LXXV, LXXVII* and *LXXXIa* from Period I of Tilaura-kot, *Type XIV* from Period IV of Hastināpura and *Type IIc* from the miscellaneous pottery of

Tilaura-kot. There are a few strap-handles, presumably of cooking-pans. Vases present *Types CXVIII, CXVIIIc, CXXII, CXXIII, CXXVII, CXXVIIc, CXXVIII, CXXVIIIa, CXXVIIIb, CXXX, CXXXIIc, CXXXIIh, CXXXVI, CXLIIa, CXLIIc, CXLIV, CLIVf, CLIVg, CLXVIIb, CLXVIIc*, and a variety of *CLXVIIa* from Period I of Tilaura-kot, *Types V, VIIIc, XIa, XIII, XIIIb, XIIIc* and *XVII* from the miscellaneous pottery of Tilaura-kot and a variety of *XVIII, XVIIIa*, a variety of *XIX, XXIV, XXVIIb, XXVIIc, XXVIIe* and *XXXa* from Kodan. Spouted vases resemble *Types XII* and *XIIa* from the miscellaneous pottery of Tilaura-kot. Of the twelve spouts recovered, one is shaped like the head of an animal with a trunk, the eyes being near the luting point.

A few sherds of the red ware, which resemble the pottery of Piprahwa (p. 226), appear to be posterior to the pottery of Kodan.

The finds of a terracotta plaque relieved with a human figurine (pl. CXXXIII, 3) in the Śuṅga style, terracotta animal figurines with stamped designs (pl. CXXXIV B, 2, 3 and 5), Kushan coins (pl. CXXXII A, 4) and human figurines (pl. CXXXIII, 1 and 2 and pl. CXXXIV A, 1 and 2), coupled with the evidence of pottery, suggest an almost continued occupation of the site, if with an occasional break, from the third century B.C. to about the eighth century A.D.

Of the three copper coins, all circular, found here, one, 2.2 cm. in diameter, .1 cm. in thickness and 4.53 gm. in weight, is absolutely defaced. The second coin, 2.5 cm. in diameter, .3 cm. in maximum thickness and 10.635 gm. in weight, is also extremely blurred. It is certainly a Kushan issue. The motifs on the obverse and reverse are perhaps a seated king and Śiva standing with his bull respectively. If this identification is correct, it might be an issue of Vima Kadphises. The third coin (pl. CXXXII A, 4), 2.4 cm. in maximum diameter, .34 cm. in thickness and 12.2 gm. in weight, though badly defaced, can be attributed to Huvishka without any doubt. On the obverse is the king (defaced) riding on an elephant to right, while on the reverse is a standing deity to left with right hand extended and left hand, akimbo, near the hip, perhaps on the handle of a short sword (defaced). The legends on both sides and the monogram on the reverse have disappeared.

There are six terracotta human figurines, two being fragments of legs. All are red, some with a grey core. The red slip is extant on five specimens. The plaque in the Śuṅga style is a fragment preserving only the defaced head (pl. CXXXIII, 3). The coiffure is in the form of a large bun with horizontal combings. There are two more heads, but of a much later date. The better preserved one (pl. CXXXIII, 1) presents an ovalish face, slightly smiling, with an open mouth, a prominent nose, incised lenticular eyes having circular holes for pupils, incised eye-brows and a narrow forehead. The hair, indicated by oblique incisions, projects behind the crown in the form of a fan. On the crown is a deep hole. The ears are not modelled, a hole on either side serving the purpose. The back side of the head is flat like a plaque. The other head (pl. CXXXIII, 2) is badly mutilated, but looks similar to the preceding. Round the neck is an applied torque decorated with oblique incisions. The fourth figure (pl. CXXXIV A, 1), female, with head missing, has

a hollow prominent bust and waist fixed to a cylindrical high base. The available part of the body is freely made by hand. Both the hands rest on the bent knee, the palm of the right hand being concave like a bowl. A circular depression marks the navel. Around the neck is a broad applied band with oblique incisions and round the forearms are two broad bangles, also applied, but without incisions. Figures from Ahichchhatrā with a similar technique of manufacture are attributed to A.D. 550-750. The remaining two are fragments of legs, of which one is reduced to a crudely-fashioned foot and ankle, with a plain applied anklet resting on a flat base (pl. CXXXIV A, 2).

The terracotta animal figurines number ten, two of which are bulls or cows and one at least is a horse. With the exception of the horse which is grey, all are red, usually with a red slip, some with a grey core. The horse (pl. CXXXIV B, 4), with a plume, applied ears (missing) and incised mane, has diamond-shaped incised eyes with punctured dots for pupils. Around the eyes is a row of pin-holes. The nostrils and mouth are indicated by pin-holes and a straight incision respectively. There is a transverse hole through the snout for a string. The forehead of one (pl. CXXXIV B, 5) of the bulls (or cows) with diamond-shaped eyes and punctured dots for pupils is stamped with a solar symbol having ten rays radiating from a central pellet. Above this symbol is a deep hole. Immediately behind the head, remarkable for its naturalistic treatment, is a punched flower with six rough semicircles arranged around a raised pellet. The damaged head (pl. CXXXIV B, 1) of an unidentified animal has applied pellets for eyes with holes for pupils. Its temple is decorated with a row of pin-holes. Through the snout is a transverse hole for a string. The torso of another unidentified animal (pl. CXXXIV B, 3) is decorated with stamped leaves, of which nine are extant. Another torso (pl. CXXXIV B, 2) is remarkable for a carpet on its back. The carpet is decorated with five rows of pin-holes, each row separated from the other by an incised line. Above each leg is the stamp of an eight-spoked wheel.

The other terracotta objects consist of the fragment of a fairly large red ball with a red slip, two vase-shaped red beads and the fragment of a red disc with a large perforation, 2 cm. in diameter, near the edge. One (pl. CXXXIII, 4) of the beads has a disc-like rim (with concave end) and a conical profile and is treated with a red slip. The second bead (pl. CXXXIII, 5) with a black slip, has a disc-like rim, a sloping neck and a truncated conical body. The disc (pl. CXXXIII, 6), 8.2 cm. in diameter and 2 cm. in maximum thickness, might have been used as a net-sinker.

5. KADZAHAWA (DISTRICT TAULIHAWA)

9 km. south of Taulihawa as the crow flies, is the village of Kadzahawa (wrongly written as Parrahwa in Survey-sheet 63 $\frac{N}{E}$; lat. 27° 28' N.; long. 83° 3' E.). Immediately to the east of the village and partly covered up with modern houses is an extensive habitation-mound, nearly 214 m. east-west (300 m. including the part occupied by the

village-habitation) and 168 m. north-south. Locally known as *kot*, it rises gradually from the surrounding fields to a height of about 3 m. At the base of a large *pīpal* tree on this mound near its northern edge rests Sāmāi-devī (in the semblance of two *stūpa*-shaped clay lumps), the village goddess, worshipped with offerings of terracotta elephants and horses. A large part of the mound is under cultivation. A few years back, while digging in this mound near its south-western corner, several copper coins were encountered. These coins have been thrown away by the children who used to play with them. Many of them, according to the villagers, bore Mahādeva with a *triśūla* and bull. Most probably, they were Kushan coins, a presumption substantiated by the find of two such coins (below, p. 212) during the visit of the party.

Though no brick structures are exposed at present, the existence of such structures beneath the surface is suggested by piles of brick-bats at places. These were found in course of the tilling operations. Several full bricks were utilized for a sort of low platform near a well. The size of these bricks is 33 cm. × 21.5 cm. × 5.4 cm. The existence of ring-wells is implied by the find of terracotta rings.

The site is rich in terracottas and pottery, particularly of the post-Christian centuries. Sherds of the thick grey ware, with both black and grey slip, were also found, but their number is very limited. The surface-pottery is primarily of the red ware.

The dish is the only vessel in the grey ware that preserves its rim and corresponds to *Types Ib, Id, II, Iib, Vb, Vd* and *Ve* from Period I of Tilaura-kot. Among the remaining sherds of this ware, the lower portion of a bowl with a flattish base can only be recognized.

A major part of the sherds of the red ware is post-Christian. A few decorated sherds have been recovered. Designs consist of triangular notches, oblique incisions with thickened tops, crescent-shaped decoration made by fingers on an applied band, chevrons on an applied band and fish-scales in relief. The last design was noticed in Stratum III of Ahichchhatrā.

Four fragments of dishes were alone found in the red ware. They represent *Types IIa, IIc, VI* and *VIc* from Period I of Tilaura-kot. Bowls occur in profusion, but the shapes are limited to *Types XII, XXVIIIb, XXVIIIc, XXVIIIe* and *XXIXc* from Period I of Tilaura-kot, *Id, II* and a variety of *IX* from Period IV of Hastināpura. Basins include *Types XLVb, XLIXc, Lg, LII, LIII, LIIib* and *LVI* from Period I of Tilaura-kot. A fragment of a vessel-on-stand resembles *Type LXb* from Period I of Tilaura-kot. Lids are numerous and represent *Types LXI, LXIb, LXXVII, LXXVIII* and *LXXXII* from Period I of Tilaura-kot, *Types X* and *LIII* (without finger-tip decoration) from Period III of Hastināpura, *Types IVa, IVb* and *XIV* from Period IV of Hastināpura, *Types II* and *Iib*, from the miscellaneous pottery of Tilaura-kot and 29f from Arikamedu.¹ Among other shapes, three are noteworthy: a bowl-shaped lid with a horizontally splayed-out concave

¹ *Ancient India*, no. 2 (1946), p. 65.

rim, a semicircular body and a central cylindrical cup, a bowl-shaped lid with a central cup in the form of a shallow bowl with an out-turned featureless rim and receding sides; and a conical lid crowned by a knob. Frying-pans are shallow: one has a loop-handle in continuation of the out-turned featureless rim, while another, with a similar rim, has a triangular handle with a perforation. Vases include *Types CXVIII, CXVIIIc, CXXII, CXXIIc, CXXIIIb, CXXIIIh, CXXVII, CXXVIIc, CXXVIIIb, CXXXI*, a variety of *CXXXIIIh, CXXXVIb, CXL, CXLII, CXLIIa, CXLIIc, CXLIIg, CXLIIIh, CXLIV, CXLIVa, CXLVII, CXLVIIg, CLII, CLIIb, CLIIc, CLIVc, CLIVg, CLV, CLVa, CLVIII, CLVIIIa* and *CLXVIc* from Period I of Tilaura-kot, *Types V, VI, VII, VIIa, VIIc, VIIId, XII, XIIa, XIV, XIVa, XVII, XVIIIa* and *XVIIIb* from the miscellaneous pottery of Tilaura-kot and *Types XIa, XIII, XVIIIa, XVIIIc, XIX, XXI, XXIV, XXVI, XXVIb, XXVIc, XXVIIe* and a variety of XXVIII from Kodan. Of the twelve spouts of vases, one is in the form of the trunk of an elephant. *Type V* from the miscellaneous pottery of Tilaura-kot occurs in abundance; the handles are mostly triangular and rarely truncated triangles with sides slightly concave.

A few sherds of the red ware are analogous to the pottery of Piprahwa (p. 226) and seem to be later than the pottery of Kodan.

Of the two copper coins from Kadzahawa, one (pl. CXXXII A, 2), 2.65 cm. in diameter, .3 cm. in maximum thickness and 13.19 gm. in weight, is an issue of Kanishka. On the obverse is the king to left, with a heavy long coat on. With a long spear in his raised left hand, he is sacrificing at an altar. On the reverse and within a dotted border is a four-armed standing deity (Śiva ?) to left, with a halo round his head. In his lower right hand is a noose (?), in upper right a *damaru* (or *vajra*) and in upper left a trident, the object in the lower left being too defaced to be identified. To left, below the right hand, is the monogram. The other coin (pl. CXXXII A, 3), 2.4 cm. in diameter, .35 cm. in maximum thickness and 13.3 gm. in weight, belongs to Huvishka. On the obverse is the king facing, half reclining on a couch, while on the reverse is a standing deity with his right hand extended and left, akimbo, resting on the hilt of a small sword. Below the right hand of the deity is the monogram.

The remaining antiquities, all in terracotta, number twenty-four excluding a terracotta disc and a few shapeless terracotta objects.

There are at least fourteen human figurines. All of them are red, some with a grey core. The red slip is preserved on several specimens.

Stylistically earliest is the fragment of a plaque with the relief of the lower part of a crudely-executed stiff standing figurine (pl. CXXXV A, 3). With the end of the *dhōṭī* dangling in the front in vertical folds, the figurine recalls the degenerate phase of the Śunga art.

Seven of the figurines are reduced to heads, with necks and portions of shoulders extant in some cases, the heads of two being badly damaged. Most of them present outlandish features. Figures with similar traits from Ahichchhatrā have been

assigned to A.D. 450-750. Three (pl. CXXXV B, 1, 2 and 3) of the heads have practically no foreheads, the flat part of the head abruptly starting from the eye-brows, as in figures 133¹ (assigned to A.D. 650-750) and 242² of Ahichchhatrā. Characterized by an almost triangular face with prominent incised lenticular eyes and protruding circular pupils giving the impression of applied eyes, a slit mouth, applied lips, a pointed chin, a pinched nose and large elongated hanging ears, they appear to have been modelled freely by hand. Above the crown rises the hair, like a tuft, incised with a row of vertical lines in one specimen (pl. CXXXV B, 1) with an incised circle on the earlobe. The base of the conical tuft, slightly tilted towards the sinister, in the second (pl. CXXXV B, 2) is decorated with a row of oblique incisions; this head has a tenon-like projection below the neck possibly for insertion in a hollow body. The applied double band placed diagonally on the left shoulder and chest, extant in two specimens (pl. CXXXV B, 1 and 3), possibly represents the scarf. The fourth head (pl. CXXXV B, 6) with eyes similar to those of the preceding three, a narrow receding forehead and an open mouth in the form of a semicircular slit has an almost U-shaped face. The large elongated flat ears have two circular incisions, one near the top and the other near the bottom. A similar incision occurs at the junction of the raised arched eye-brows. The hair, projected above the crown like a diadem, is incised with oblique lines. The back side of the head is flat and slightly concave. It appears that the head was first pressed out of a single mould and afterwards the necessary incisions were made. A better preserved example of this type is furnished by a specimen from Bamhni (p. 218; pl. CXXXVII A, 1). The fifth head (pl. CXXXV B, 5), with eyes analogous to those of the preceding, a narrow receding forehead and projecting elongated ears, has a bulging lower part of the face. In the centre of the forehead is a pellet. The projecting hair, with a row of vertical incisions, is tied at the base by an applied band.

A small crudely hand-modelled figurine (pl. CXXXV B, 4), in the round, with lower portion below the waist missing, has circular eyes with holes for pupils, a pinched nose, a slit mouth and a damaged tuft. No attempts were made to fashion the forehead. The left hand of the figurine rests above the waist, the extended tapering right arm being broken. A band with a row of punctured dots is applied diagonally on the front part like an *upavīta*. Another band, also applied, is extant partially on the waist.

A hand-modelled female torso (pl. CXXXV A, 1), with a shallow circular depression for the navel, is in the round and bereft of ornaments. The remaining four are reduced to legs (pl. CXXXV A, 2 and 4) and arms, all crudely executed. The nails of the toes of one leg, with incised lines differentiating the fingers and an applied anklet, are marked by circular incisions (pl. CXXXV A, 2).

Fragment of a walled enclosure (one corner available) evidently represents a votive tank (pl. CXXXVI A, 1). Red with a grey core, the available portion is absolutely

¹ *Ancient India*, no. 4 (July 1947-January 1948), p. 136, pl. XLVIII A.

² *Ancient India*, no. 4, p. 158, pl. LVI A.

plain. Another fragment (pl. CXXXVI A, 2), with traces of two figurines against its back wall, is reminiscent of the votive tanks of Ahichchhatrā,¹ ascribed to A. D. 100-200. It is, however, oval instead of rectangular and the wall is only on one side. Three crudely-executed legs of the figurines are alone extant. The fragment is red with a red slip.

A roughly-fashioned fragment of an indeterminate object, red with a grey core, bears a number of stamped circlelets (pl. CXXXVI B, 1).

Animal-figures are represented by only two red torsos, both absolutely plain and one with a grey core and a red slip (pl. CXXXVI B, 5).

Of uncertain purpose is a roughly barrel-shaped terracotta object in red (pl. CXXXVI B, 2).

Forming part of an indeterminate object (rattle ?) is a handle in red, its top edge being fluted (pl. CXXXVI B, 3).

An ellipsoid object with a central groove (pl. CXXXVI B, 4) was possibly used for a net-sinker or loom-weight.

6. LAMTIYA (DISTRICT TAULIHAWA)

Slightly above 3 km. south of Taulihawa and about 200 m. east of the village of Lamtiya (lat. 27° 31' N.; long. 83° 4' E.) is an elevated *gochar* land, locally known as *kot*, where Sāmāi-māi, represented by a small pedestal of bricks and mud, is being worshipped under a plum tree with an offering of crude terracotta elephants, horses, pigs and goats. The denuded mound rises almost imperceptibly from the peripheral field to a maximum height of about 2 m.

The pottery on the surface is rather scarce and mostly in small fragments. Of the thick grey ware only a few sherds were recovered. The major part of the red ware is post-Christian. The rest along with the grey sherds has just enough correspondence to the pottery of Period I of Tilaura-kot to indicate the contemporaneity of this site with Tilaura-kot in its early stage of occupation of Period I.

Of the sherds of the grey ware, some are black-and-grey. The slip is either grey or blackish. The dish is the only form available in this ware. It represents *Types I, Ia, II, IIe, IIIa* and *IVa* from Period I of Tilaura-kot.

The mesh-like impression is the sole decoration found in sherds of the red ware. Bowls are not many and represent a coarse variety of *Types XIVk, XXVIIIe* and a variety of *XXXb* from Period I of Tilaura-kot and *Types I* and *Ib* from Period IV of Hastināpura. In basins are found *Types XLVI, XLIXa, La* and a variety of *LIII* from Period I of Tilaura-kot. Lids are represented by *Types VIa* and *VIb* from Kodan. A single fragment of a shallow frying-pan, with a loop-handle in continuation of the out-turned externally-thickened rim, was alone found. Vases resemble *Types CXVIIIa, CXVIIIe, CXXIIIb*,

¹ *Ancient India*, no. 4, pl. XXXIX, figs. 87 and 89.

CXXIIIh, *CXXVIII*, *CXLIV*, a variety of *CLIII* and *CLVI* from Period I of Tilaura-kot, *Types V*, *VIII*, *VIIIc*, a variety of *X*, *XIa*, *XIVa*, *XVII* and *XVIIIa* from the miscellaneous pottery of Tilaura-kot and a variety of *Type XVIII*, a variety of *XXI*, *XXIV*, a variety of *XXVI*, *XXVIb*, *XXVIc*, *XXVId*, *XXVIf* and a variety of *XXVIII* from Kodan. Two of the sherds represent spouts and a third a bottle-necked vase.

An appreciable percentage of pottery appears to be even posterior to the pottery of Kodan. With their types, fabric and comparatively fresh look, these sherds have affinity with those of Piprahwa (p. 226). Sihokhor, Hardewa, Daldalha, Dohni, Bijua, Patharkot, Chaganth, Patkahawa and the later pottery of Bamhni.

The site yielded only one copper coin (pl. CXXXII A, 7) belonging to the circular die-struck series of Ayodhya ascribed to the first and second centuries A.D. by Allan. On the obverse is a bull, badly defaced, below which is the legend [Sa]t [ya]mit-[ra] sa. On the reverse are a peacock (on the left) to right, a palm tree (on the right) and a wavy line (below) representing perhaps a snake. The diameter of the coin is 1.1 cm., its weight being 1.64 gm.

Other finds consist of a sealing with three indistinct letters in characters of about the third century A. D. (pl. CXXXVII A, 3), a misshapen standard cylindrical circular terracotta bead in smoky-red (pl. CXXXVII A, 6), a fragment of a terracotta ball or bead in smoky-red (pl. CXXXVII A, 8), a plano-convex fragment of a terracotta object with granular indentations on the flat side (pl. CXXXVII A, 7) perhaps for use as a stamp, fragment of a hollow figurine (?) and a solid terracotta head (pl. CXXXVII A, 4), crudely executed by hand and badly damaged. The last, with large incised eyes, a slit mouth and hair with vertical incisions, lacks forehead and is somewhat affiliated to the similar figurines from Kadzahawa (p. 213). It is red with grey core. Apart from these, there are a glass bangle, an ornamental brick carved in the style of Kodan and the corner fragment of a squarish or oblong terracotta votive tank (?) with vertical walls, a flat base and an opening in one wall. The latter is treated with a red slip.

7. SISANIA (DISTRICT TAULIHAWA)

The ancient habitation-mound (pl. CXXXVIII), called *kot*, of Sisania,¹ (lat. 27° 28' 20" N.; long. 83° 5' 10" E.), 9 km. south-east of Taulihawa and strewn with potsherds of red ware and brickbats, is quite extensive, though not very high. The bricks recovered by the villagers during digging operations are of large size. Though the antiquity of the site goes back at least to the Śuṅga period, as suggested by the find of a plaque (pl. CXXXVII B, 3) of the late-Śuṅga phase, the most flourishing period seems to have been the centuries immediately following the Christian era, as at Kadzahawa. On two sides of the mound, but some yards further, are ruins of brick structures.

¹ Noticed by P. C. Mukherji (*op. cit.*, p. 33).

With the exception of a single sherd, possibly of a dish, of the grey ware, the collected pottery is entirely of the red ware. Early shapes are very few. The site could not be thoroughly explored due to rains on the date of the visit of the party. Of the two decorated sherds, one bears mesh-like impression and the other, a late one, triangular notches.

Bowls represent *Types Ib, If, II* and *XIX* from Period IV of Hastināpura. Lids are similar to *Types IV, XII* and *XIVb* from Period IV of Hastināpura and *Type IId* from the miscellaneous pottery of Tilaura-kot. Apart from this, there are three fragments of thick lids of coarse fabric with an out-turned externally undercut (grooved in two specimens) rim and receding sides. Basins, some lipped, present *Types XLIV, XLVI, XLVIII* and a variety of *LIII* from Period I of Tilaura-kot and *Type XL* from Period IV of Hastināpura. There are two specimens of shallow frying-pans with a loop-handle in continuation of an out-turned featureless rim. The vases include a variety of *Type CXXII*, a variety of *CXXIIIb, CXXIIIp, CXXIIIc, CXXXIV, CXLIIc, CXLIV, CXLVIII, CLIIc, CLIII, CLV, CLVI* and *CLVIII* from Period I of Tilaura-kot, *Types V, VI*, a variety of *VII, VIIIC, IX, XIII, XVIII, XVIIIa* and *XVIIIb* from the miscellaneous pottery of Tilaura-kot and a variety of *Type XIXc, XXV, XXVI* and *XXVIIb* from Kodan. The types affiliated to Period I of Tilaura-kot are usually coarser. Apart from these there are fragments of several vases, a few with some affinity with the vases from Period IV of Hastināpura. A single specimen of spout, with two prominent grooves round the middle part, alone was found.

A few sherds, to judge by their type and fresh look, appear to be post-Kodan and are contemporaneous with the pottery of Piprahwa (p. 226).

Of the three circular copper coins from this site, one (pl. CXXXII A, 1), 2.4 cm. in diameter, .4 cm. in maximum thickness and 15.15 gm. in weight, is an issue of Kanishka. On the obverse is the standing king to left, clad in a long coat, with his right hand above an altar (defaced), the raised left hand holding perhaps a long spear (defaced). The standing deity with right hand advanced and left hand, akimbo, near the waist, on the reverse, is too defaced to be identified. The legends and the monogram have vanished completely. The highly defaced second coin (pl. CXXXII A, 5), 2.4 cm. in diameter and .35 cm. in thickness and 14.45 gm. in weight, probably belongs to Huvishka. On the obverse is the king seated (?) and on the reverse is the standing deity, blurred. The third coin (pl. CXXXII A, 6), 2.5 cm. in diameter, .15 cm. in thickness and 7.33 gm. in weight, is a coin of ancient Nepal. On one side is a lion to left with one of its fore-legs raised; the legend above the lion is blurred. On the other side is a deity, with his right hand raised and left hand on thigh, seated on a lotus within a dotted border. Typologically, the coin is associated with the issues of Mānāka.

Other antiquities from the site, apart from arms of crude terracotta human figurines resembling the illustrated one from Period IV of Hastināpura,¹ are only four,

¹ *Ancient India*, nos. 10 and 11 (1954 and 1955), pl. XXXIX, 9.

all in terracotta, three being human figures. One of them is a well-burnt red fragmentary plaque with the relief of the lower part of a standing female figurine (pl. CXXXVII B, 3) of the late Śunga affiliation. The *sāḍī* is indicated by vertical folds. Of the ornaments, the girdle of two beaded strings is alone extant. The lower parts of the legs are missing. The second (pl. CXXXVII B, 2) represents the fragmentary bust of an almost life-sized female figure with an applied broad necklace decorated with oblique incisions. Red with a grey core it preserves a red slip on the front side. The concave back side is also red and fairly well-finished. Presumably, the body was hollow. The third figure (pl. CXXXVII B, 1), with the lower half missing, is badly damaged. Red with a grey core, it has incised lenticular eyes, an applied band-like torque and ring-like ear-ornaments. With the exception of the face, which might have been partially moulded, the figure is freely modelled by hand. The back side is flattish.

The fourth find (pl. CXXXVII B, 4), in red with a grey core, is the fragment of a muller-shaped object with ridges and incisions similar to those from Tilaura-kot (p. 119; pl. XLII B, 19).

8. BAMHNI (DISTRICT TAULIHAWA)

The village of Bamhni (lat. 27° 29' 30" N.; long. 83° 1' 30" E.), locally called Babhni, lies 6.5 km. to the south-west of Taulihawa. Immediately to the west of the village-habitation is a low flattish mound which rises from the surrounding field to a maximum height of about 1.5 m. Locally known as *kot*, it has a sacred spot where terracotta elephants and horses are dedicated to the presiding deity represented by a small *stūpa*-shaped clay object. The mound is under active cultivation.

The pottery found on the mound is entirely of the red ware and appears to be post-Christian. It is affiliated to the pottery of Kodan and Piprahwa (p. 226) and some types of the miscellaneous pottery of Tilaura-kot. Most of the types found here are also represented by the sherds of Sisania and Kadzahawa. There are coarse fragments of neckless vases with a narrowing externally-collared rim (some with grooves) and a globular profile and basins with externally-collared rims; these types are evidently survivals of early forms found in Period I of Tilaura-kot. A single sherd has two rows of short oblique incisions.

Bowls are similar to *Types Ie, II and III* from Kodan. A fourth type is represented by a small bowl, with a slightly-inturned bevelled rim and convex sides, which, from the fabric and look, appears to be later than the pottery of Kodan. Lids represent *Types Va, VI, VIa, VIb*, a variety of *VII* and *VIII* from Kodan and *Type II* from the miscellaneous pottery of Tilaura-kot. The available portion of a lid-fragment is analogous to the upper part of *Type XIVb* from Period IV of Hastināpura. There are three more types, one with an out-turned nail-headed rim having two grooves on top and receding sides, the second with gradually-expanding sides crowned by a knob and the third, of thick coarse

EXPLORATIONS

fabric, with an out-turned externally-undercut and ribbed rim and receding sides. Basins with a nail-headed rim and receding or convex sides are fairly common. Two other types, one with an incurved tapering rim and the other with a flat-topped triangular rim having a groove on the inner side, are both very large and thick. A single sherd of a shallow frying-pan with a perforated triangular handle in continuation of the out-turned featureless rim has been found. There are two fragments of large troughs. Cooking-*hāṇḍis* with a carinated and ridged waist present several varieties of rim, one variety being similar to *Type XIa* from the miscellaneous pottery of Tilaura-kot. Spouts number four, one having grooves around it. Other shapes of vases include *Types V, VI, VIIa, VIII, VIIIc, XIVa, XVII, XVIII and XVIIIa* from the miscellaneous pottery of Tilaura-kot and *Types XIX, XX, XXV, XXVI, XXVIb, XXVIc, XXVIId, XXVId, XXXIa and XXXIIc* from Kodan.

An appreciable percentage of sherds, mostly of vases, bears similarity to the pottery of Piprahiwa (p. 226) in shape, fabric and look.

From the cleanings of an old well, faced with bricks, a number of terracotta figurines are said to have been recovered. With the exception of two, which lay by the side of the well, all of them are reported to have been removed by a Block Development Officer of Taulihawa.

A major part of the upper portion of one (pl. CXXXVII A, 2) of these two figurines is extant. Like four of the specimens from Kadzahawa (p. 213 and pl. CXXXV B, 1-4), it has practically no forehead and is hand-modelled. The outlandish features of the triangular face, with a pointed chin, a horizontally-slit mouth, a pinched hook-like nose, large incised lenticular eyes, protruding eye-balls with incised circles round them and incised eye-brows, are pronounced. The ears are double triangles, each with a deep hole. The arms, with crude incisions for fingers, are dwarfish and mis-shapen. The rolled hair, in the form of a peaked cap tilted to the sinister, is incised with two horizontal lines with a row of stamped circlelets in between. Above the nose is another circlelet. Round the neck is an applied flat torque decorated with circlelets. An applied folded scarf (not reproduced on the back side) is worn diagonally in the *upavīti* fashion. Red with a grey core and a red slip, the figurine is in the round.

The other piece is reduced to head alone with foreign features (pl. CXXXVII A, 1). With the U-shaped face, mouth in the form of a semicircular slit, very conspicuous thick nose, prominent lenticular incised eyes, raised arched eye-brows meeting together, receding forehead and projecting elongated large ears with two stamped circlelets, it is analogous to a specimen from Kadzahawa (p. 213; pl. CXXXV B, 6). At the junction of the eye-brows is a circlelet. The crown-like raised hair bears incised lines and is decorated with three raised circles, each with a central pellet. Turned grey due to indifferent firing and treated with a dark-red slip, it is partly moulded.

The only other antiquity, which is collected from the surface, is the torso of a terracotta animal with a red slip (pl. CXXXVII A, 5).

9. HARDEWA (DISTRICT TAULIHAWA)

Hardewa (lat. $27^{\circ} 30' 30''$ N.; long. $83^{\circ} 2' 40''$ E.) is 3.5 km. south-south-west of Taulihawa. The village contains two mounds. The larger one, by the side of a tank, bears the ruins of a structure. The corner of the latter, built of bricks of large dimensions, is exposed to a height of fifteen courses. On the top of this mound is in worship Sāmāi-māi represented by a clayey cone. The second mound, locally called *kot*, is low and slightly higher than the surrounding fields.

The pottery on the surface is scarce. Affiliated to the pottery of Kodan and Piprahwa (p. 226) and to some of the types from the miscellaneous pottery of Tilaura-kot, it is entirely of the red ware. A single sherd bears finger-nail incisions.

Of the bowl-fragments, one has a slightly out-turned rim with a groove on the top and receding sides, a second presents a vertical nail-headed rim with a groove on the outer side and the rest are reduced to lower parts with a flat button-base and receding sides. One of the lid-fragments has a central knob, while others are similar to *Type VI* from Kodan. Of the two types of basins, one resembles *Type Xa* from Kodan and the other has a nail-headed rim with a prominent depression on the outer side and slightly convex sides. One of the vessels is like a tumbler with a vertical rim having a groove on the top and straight sides having an outward turn near the lower portion. There are several fragments of cooking-*hāṇḍīs* with a carinated and ridged waist. Vases include *Types VIIa, VIII, XIa* and *XVII* from the miscellaneous pottery of Tilaura-kot and *XVIIIa, XIX, XIXc* and *XXXIIc* from Kodan. Among other types of vases is noteworthy a neckless one with a narrowing externally-collared rim and a globular profile.

A torso of a terracotta animal figurine (pl. CXXXIX A, 2) forms the only other antiquity.

10. SONAGARH (DISTRICT TAULIHAWA)

Located between the right bank of the Bel and the left bank of the Sukhbel (western) near their confluence, Sonagarh (lat. $27^{\circ} 40'$ N.; long. $82^{\circ} 55'$ E.), also known as Sonawangarh, is about 600 m. from Bhitria (locally called Bhitaria) and nearly 5 km. north-east of Madahwa. Except for a hut where lives a *sādhu*, the site is absolutely deserted and engulfed by jungle.

In a thatched room, by the side of the *sādhu's* hut, is installed a ten-armed image of Chāmūṇḍā (pl. CXXXIX B), possibly made of sandstone. The image, 1 m. 29.5 cm. high and 75 cm. wide, is badly defaced. Still one can feel that it was originally of good workmanship. The back portion of the figure is cut out of the back-slab. Stylistically, the sculpture is ascribable to the ninth century A. D.

Reduced to skin and bones and decorated in a girdle and bun-shaped coiffure, the goddess is seated in *lalitāsana* with her right leg pendant above a corpse. The

two uppermost hands carry the skin of an elephant above the head. Among her remaining four left hands, the lowest holds against the navel region a skull-cup, the next a chopped head and the third a shield (?), while the fourth, through the arm-pit of which passes a *śakti* (spear), was perhaps attached to the teeth (*danta-lagna*). Of the right hands, the lowest possibly rested on her right thigh in *vara-mudrā* (?), the next holds a *triśūla*, the third a small sword and the fourth a *damaru*. Near each of the rounded top corners of the back-slab is a flying figure. On either side of Chāmuṇḍā are, in a vertical row, several of her attendants. A jackal is seen below the chopped head held in one of the left hands of the deity.

Near the hut is a heap of bricks and brick-bats. Several of these bricks are beautifully decorated like those in the exposed temples of Kodan. A few fragments of a badly-weathered door-frame of sandstone with three gradually-receding carved facets also lie amidst the pile.

These ornamental bricks evidently hailed from the two ruined brick structures (pl. CXL A), reduced to mounds, which stand near the hut. A portion of the inner wall (pl. CXL B) of the larger of the two had been exposed by an unknown treasure-hunter who also made a deep pit in the centre of both the mounds. The larger structure, which, according to the *sādhu*, enshrined the image of Chāmuṇḍā, has more than one chamber.

Not far from the temple of Chāmuṇḍā but on the right bank of the Sukhbel (pl. CXLI A) are ruins of brick structures covered with jungle-growth (pl. CXLI B). Surendra Singh of Taulihawa (p. 203, fn. 1) showed the author several beads of carnelian, agate and chalcedony and three circular copper coins which he claimed to have collected from this site. Though covered with corrosion these coins appear to be early; one of them might even be punch-marked.

The pottery picked up on the surface near the right bank of the Bel is entirely of the red ware. Though greatly water-worn, it displays unmistakable affinity, both in shape and fabric, with the pottery of Kodan. A single sherd bears on the mica-dusted outer side five-petalled flowers in relief, each petal and the central circle having within a raised pellet; possibly the vessel was finished with a mould.

Though the number of bowls is fairly considerable, most of the sherds are reduced to the lower parts with receding sides ending in a button-base bearing thread-marks. The available rim is slightly inturned and featureless and roughly resembles *Type I* from Kodan. Lids present *Types VI, VIa*, a variety of *VII* and *VIII* from Kodan. Apart from these, there are two more types of lids. One of them preserves only the lower part of the receding sides, the flat base and a central knob, the available portion resembling *Type XIV* from Period IV of Hastināpura. The other type is represented by fragments of large lids of a thick section and coarse fabric with an out-turned externally-undercut and ribbed rim and receding sides presumably ending in a convex base. This type was also found at Sisania and Bamhni. *Type IX* from Kodan is presented by a single specimen.

There are several sherds of carinated cooking-*hāṇḍīs* with a ridged waist. While some have prominent ridges like *Type XI* from Kodan, others have inconspicuous ridges. Two of the latter type bear triangular notches above the ridge. Spouted vases are analogous to *Type XV* from Kodan. Vases present *Types XVIII, XVIIIa, XVIIIb, XXI, XXIV, XXV, XXVI* and *XXVIc* from Kodan and *Types XIII, XIIIa, XVII, XVIII, XVIIIa, XIX* and *XIXb* (these types themselves are allied to some types from Kodan) from the miscellaneous pottery of Tilaura-kot. The only distinctive type is furnished by the fragment of a basin-like vessel with slightly-convex sides and a lug-handle in continuation of the nail-headed rim.

11. SAINA-MAINA (DISTRICT BHAIRHWA)

Saina-Maina does not feature in the Survey-sheet. It is located on the slope of the hill immediately to the north-east of the Thāru village (pl. CXLII A) of Bankatwa (lat. 27° 41' N.; long. 83° 22' 30" E.), 9 km. west-south-west of Butwal.

The description of P. C. Mukherji is still applicable to the extensive ruins mostly hidden in the forest. The image of Buddha seen by him on the first rise (pl. CXLII B) of the hill could not be traced, though there are ruins of brick structures, bricks decorated in the style of Kodan and sherds. The image had been there even fifteen years back when the District Magistrate of Taulihawa chanced upon it. The pillar (pl. CXLIII A), with the inscription 'Om Manipadme hum' in Tibetan characters, now lies in the field to the east of the village of Bankatwa. According to the local report, some people attempted to take it away by a bullock-cart some twelve years back, but after bringing it down, they left it where the party found it.

The ruins and the scattered stone architectural pieces like door-jambes (pl. CXLIV A), lintels, *kalāṣa* and *āmalaka* (pl. CXLIII B) are mostly covered by a shroud of fallen leaves. Most of the fragments noticed by P. C. Mukherji are still there. One of the lintels (pl. CXLIV B), by the side of the hill-stream, bears Gaṇeśa on the *lalāṭa-bimba*; evidently, it pertained to a Brahmanical temple, either of Śiva or of Gaṇeśa.

The collected sherds, entirely of the red ware, are akin to the pottery of Kodan and Sonagarh. One of the sherds appears to be moulded; it is decorated with a raised line having pellets on either side, all in relief. The other patterns consist of rows of incisions, either circular or in the form of finger-nails.

One fragment of bowl resembles *Type III* of Kodan, but the nail-headed rim with two grooves on the top is more pronounced in this specimen. Other specimens of bowls are reduced to lower parts, available portions being similar to *Type 1e* from Kodan. Lids present *Types V, VI, VIa* and *VIIb* from Kodan. Two of the lid-fragments have a central knob, a flat base and receding sides. There is a single specimen of a frying-pan (or shallow basin) of coarse fabric with an almost vertical prominently nail-headed rim

having two grooves on the top and sides bluntly carinated to a rounded base. A small vase is somewhat analogous to *Type XIII* from Kodan. All the three spouts of vases are similar to *Type XV* from Kodan. Several cooking-*hāṇḍīs* with a carinated and ridged waist have been recovered. Most of these are affiliated to *Types XIa* and *XIb* from Kodan; in some cases the rims offer variations. The ridge is not pronounced in a few cases; one pot of this type has notches above the ridge. Other shapes of vases include *Types XVIIIa*, *XVIIIb*, *XVIIIc*, *XIXa*, *XIXc*, *XXIa*, varieties of *XXIa*, a variety of *XXIV*, a variety of *XXVI*, *XXVIIb*, a variety of *XXVII*, *XXIX* and *XXXIc* from Kodan and *XVIIIa* from the miscellaneous pottery of Tilaura-kot.

The single vase, not in the tradition of Kodan, presents a splayed-out featureless rim with a groove and a ridge on the inner side, a concave neck with a rib bearing at one place oblique incisions and a globular profile.

12. SIRINAGRA (DISTRICT TAULIHAWA)

Sirinagra (lat. 27° 36' 30" N.; long. 83° 5' 30" E.) is 7.5 km. north-east of Taulihawa and about 800 m. south of Sagar. The denuded low mound yielded worn-out pottery of the red ware closely affiliated to the pottery of Kodan. One of the sherds bears an incised double wavy line between concentric grooves, a design found also in Kodan. The pottery represents the following ceramic types of Kodan: *I*, a variety of *II* and a variety of *III* for bowls; *V*, *VI*, *VIa*, *VIIb* and *VIII* for lids; varieties of *X* and *Xa* for basins (or lids); and *XI*, *XIa*, *XVIII*, *XVIIIa*, *XVIIIb*, *XIX*, *XIXa*, *XX*, *XXb*, *XXIa*, *XXIV*, a variety of *XXV*, *XXVIa*, a variety of *XXIX* and *XXXIIc* for vases. Apart from these, there are fragments of four vases—one, of medium fabric, with an out-turned featureless rim and an inconspicuous neck, the second with an out-turned externally ridged rim, the third with a splayed-out featureless rim and the fourth with a slightly out-turned externally-collared rim, the last three being of thick and coarse fabric.

Four fragments of terracotta animal figurines constitute other finds; two of these are torsos (pl. CXXXIX A, 1 and 3); the remaining two are either legs or trunks.

13. BIKULI (DISTRICT TAULIHAWA)

Bikuli (lat. 27° 37' 30" N.; long. 83° 7' E.) is 10.5 km. north-east of Taulihawa. One gets a rude shock at the sight of its completely denuded mounds. What had been left by nature was demolished by Führer in search of relics. But for P. C. Mukherji's timely report and drawings, nobody now can even suspect that the site once nourished a prosperous religious establishment. The site at present contains brick-bats alone.

The largest of the three brick temples was closely similar, on plan, to Temple 1 of Period I from Kodan. From this and also from the *makara*-shaped gargoyle, it may be presumed that both were of the same period. P. C. Mukherji rightly thought,

on the evidence of the scattered 'multitude of carved bricks, in innumerable patterns', that the superstructures of the temples had been highly ornamental. A portion of the smallest temple was actually found by him faced with ornamental bricks. Thus, the contemporaneity of the establishments of Bikuli and Kodan is beyond doubt.

Only a few sherds of the red ware were found. One of these appears to be mould-made and possibly represents the lower part of a bowl: it bears reliefs of two rows of pellets and a wavy line with flowers (badly defaced) in its loops, all the rows being individually within borders of concentric raised lines.

Only four other sherds preserve their shapes partly: one is the lower part of a bowl with a flat base and receding sides, the available portion being similar to *Type Ia* from Kodan; the second is also a bowl, which is somewhat analogous to *Type III* from Kodan; the third is the fragment of a vase resembling *Type XIV* from Kodan; and the fourth is possibly a lid with a splayed-out internally-thinning rim having a carination at the base on the inner side.

14. CHAGANTH (DISTRICT TAULIHAWA)

The Tharu village (pls. CXLV and CXLVI A) of Chaganth (lat. 27° 43' 40" N.; long. 83° 2' E.), locally called Changhat, is 20 km. north-north-west of Taulihawa. At the Devī-sthān there are conspicuous mounds thoroughly covered with jungle-growth (pl. CXLVII). Whether they are natural or contain ruins of ancient structures remains to be seen. The site yielded pottery.

In the jungle to the north of the village are the ruins of two brick structures in the last stage of their decay. The walls of the larger one are traceable around the tree which is partly responsible for the destruction of the structure (pl. CXLVI B).

The pottery is entirely of the red ware. While several sherds are akin to the pottery of Kodan and some of the types of the miscellaneous pottery of Tilaura-kot which themselves are affiliated to the pottery of Kodan, others appear to be later. The latter assemblage is found represented in the ceramic industry of Piprahwa (p. 226).

Bowls are represented by two fragments, both reduced to the lower portion. With a flat base and receding sides, they resemble *Type Ia* from Kodan. Lids represent a variety of *Types Va, VIIb* and a variety of *VIII* from Kodan. There are three types of basins, one with a narrowing externally-thickened and undercut rim and convex sides, the second with an inturned externally-thickened and ridged rim and receding sides and the third with an out-turned externally-bevelled rim and receding sides. Among the vases, cooking-hāṇḍīs with a carinated and ridged waist predominate. These display a wide variety of rims, some being similar to those of *Type XIa* from the miscellaneous pottery of Tilaura-kot and *Types XIa* and *XId* from Kodan. One fragment is distinguished by oblique incisions on the ridge which is not very prominent. Other shapes of vases include *Type XVII* from the miscellaneous pottery of Tilaura-kot and a variety of *Types XXIV* and *XXV* from Kodan.

EXPLORATIONS

One of the sherds represents a spouted vase and a second the lower portion of a vessel with a pedestal-base.

A fragment of a terracotta dabber (pl. CL, 5), a disc made of a sherd and a fragment of a terracotta ball (or bead) with concentric grooves constitute other finds.

15. PATHARKOT (DISTRICT TAULIHAWA)

On the lower reach of the hill (pl. CXLVIII A) overlooking the village of Patharkot (lat. $27^{\circ} 45' 40''$ N.; long. $83^{\circ} 3'$ E.; pls. CXLVIII B and CXLIX A), which is 23.5 km. north of Taulihawa, and by the side of the track which leads to Gulmi is a *kof* (pl. CXLIX B) where some sherds of the red ware and a few brick-bats were found. The site does not look promising.

Of the antiquities, one is a red terracotta ball (pl. CL, 1) and three are bangles. One of the latter, in black opaque, is triangular in section and the second, also triangular in section and opaque, is partly black (lower half) and partly indigo-blue with a row of tiny yellow studs round the top edge, while the third, with an elongated triangular section, a black opaque core and yellow and white bands and red and green strokes on the sides, has an inconspicuous ridge decorated with a cable-pattern in yellow and red. The last does not look old.

The pottery is analogous to that of Kodan and Piprahwa (p. 226). Two of the sherds bear stamped motifs resembling leaves.

Cooking-*hāṇḍīs*, with a carinated and ridged waist and various rims, preponderate over other forms; some fragments of this class of vases are akin to *Types XIa* and *XIb* from Kodan. Among other kinds of vessels the following types of Kodan are represented: *Ie* for bowls, *VI a* and *VII* for lids and *XV*, *XXIV*, *XXV*, *XXVIc* and a variety of *XXVII* for vases.

16. PATKAHAWA (DISTRICT TAULIHAWA)

The low mound, which lies close to the village of Patkahawa (lat. $27^{\circ} 33' 30''$ N.; long. $83^{\circ} 1' 20''$ E.), about 3.5 km. west-north-west of Taulihawa, yielded sherds of the red ware alone. Of the three antiquities found on the surface, one is a crudely-executed terracotta torso of an animal (pl. CXXXIX A, 6), possibly an elephant, with a red slip on the red surface, a grey core and an applied band round the hind part of the body. The second, also in terracotta, represents the head of a bovine animal (pl. CXXXIX A, 5) with punctured dots for eyes and nostrils, an indented incised line for the mouth, a transverse hole through the snout for a string, a row of punctured dots within incised lines on the forehead and a red slip on red surface. The third is a disc of a sherd of the red ware.

The pottery is akin to that of Kodan and Piprahwa (p. 226). A single sherd has triangular notches on the inner side of the rim.

One of the sherds representing bowls is somewhat analogous to *Types III* from Kodan. Of the other shapes, one has an inconspicuously nail-headed rim with a groove on the top and receding sides, the second presents an incurved internally-undercut and externally-beaded rim and slightly-convex sides, while the third is a bowl-cum-lid with a flaring externally-thickened rim and receding sides. Lids are analogous to *Types VIa, VIb* and a variety of *VII* from Kodan. Basins are somewhat similar to *Type X* from Kodan. Cooking-*hāṇḍīs* with a carinated and ridged waist and various rims are fairly common; some of these bear affinity with *Type XIb* from Kodan and *Type XIa* from the miscellaneous pottery of Tilaura-kot. Vases include *Types XVIIIa, XIX, XXV, XXVIb* and *XXVIc* from Kodan and *Types XVIIa* and *XVIII* from the miscellaneous pottery of Tilaura-kot. Particularly noteworthy among other shapes is a neckless vase with a narrowing externally thickened and undercut rim and a globular profile.

17. BIJUA (DISTRICT TAULIHAWA)

Bijua (lat. 27° 29' N.; long. 83° 8' 50" E.) is 11.5 km. south-east of Taulihawa. The site, already noticed by P. C. Mukherji under the name of Sijuwa,¹ yielded sherds of the red ware affiliated to the pottery of Kodan and Piprahwa (p. 226). Of the two decorated sherds, one bears sets of oblique hatchings meeting one another, while the other has roughly leaf-shaped stamped motifs.

Bowls, with a single exception which has an out-turned internally-thickened rim and receding sides, are reduced to the lower parts which resemble *Type Ie* from Kodan. Lids include *Type VI* and a variety of *Type VII* from Kodan. Basins have an out-turned nail-headed rim and receding sides. The single vessel with a ring-base is similar to *Type IX* from Kodan. Among vases only one variety of cooking-*hāṇḍīs* with a carinated and ridged waist is similar to *Type XIa* from Kodan. Other vases have analogues in the pottery of Piprahwa (p. 226).

Two discs made of sherds and a crude terracotta emaciated head of an animal (pl. CXXXIX A, 4), with applied circular eyes and a slit mouth, form other finds.

18. ARAURA-KOT (DISTRICT TAULIHAWA)

Araura-kot (lat. 27° 35' 30" N.; long. 83° 6' 30" E.) is 7.5 km. north-east of Taulihawa. The *kot*, which was free of jungle when P. C. Mukherji visited it, is now a forest, almost impenetrable due to thorny trees and shrubs. A proper exploration of the site needs considerable clearance.

A few sherds of the red ware alone were collected. They have affinity with the pottery of Kodan and Piprahwa (p. 226). There are a few specimens of cooking-*hāṇḍīs*

¹ P. C. Mukherji, *op. cit.*, p. 41.

with a carinated and ridged waist, one being similar to *Type XIa* from the miscellaneous pottery of Tilaura-kot. Of the two shapes of bowls, one has an inturned rim with a row of circular depressions on the outer side and convex sides, while the other has a slightly inturned flat-topped rim and convex sides. *Types VIII* (for lid) and *XXVIe* (for vase) from Kodan alone are represented in the pottery. Among other shapes is noteworthy a neckless vase with a narrowing externally oval-collared rim and a globular profile having prominent striations.

In the possession of Surendra Singh of Taulihawa were found five copper circular coins and several beads of carnelian, quartz, amethyst and agate, which he had collected from the area of Sagrahawa, Sirinagra and Araura. He has not kept any record of the exact find-spots of these antiquities. Of the coins, two have a four-spoked wheel on one side. The rest are indistinct. The beads are mostly spherical and barrel-shaped.

19. PIPRAHWA (DISTRICT BHAIHWA)

To the north of the village of Piprahwa (lat. 27° 23' 30" N.; long. 83° 16' 10" E.) and on the left bank of the Dano opposite Nipania (p. 205) is a low flattish mound. The surface-sherds with a fresh look are entirely of the red ware. Mostly of medium fabric and with a red slip, the pottery as a whole appears to be later than that of Kodan, though some shapes of Kodan continue in this industry. The decoration comprises finger-nail incisions and incised oblique strokes.

Though vases overwhelm other forms, the percentage of lids, usually with receding sides and externally or internally thickened rims, and of basins, generally with a prominent nail-headed rim and receding sides, is quite appreciable. Bowls and troughs are few. Spouts number only two. The commonest form among vases is the cooking-*hāṇḍī* with a carinated and ridged waist and various rims. Next in order of frequency is a type of vase with a slightly out-turned nail-headed rim having a groove on the inner side, a short almost vertical neck and presumably a globular profile. The following shapes of Kodan are found represented in the pottery: *Ie* for bowls, *VI*, *VIa*, *VIb*, *VII* and a variety of *VIII* for lids, *X* for basins, *XIa* and *XId* for carinated cooking-*hāṇḍīs* and *XIX*, a variety of *XX*, *XXV*, *XXVIb*, *XXVIc* and *XXVIId* for vases.

Three terracotta discs, two of which are made of sherds (pl. CL, 2), constitute other finds.

20. DALDALHA (DISTRICT TAULIHAWA)

The flattish mound of Daldalha (lat. 27° 30' 50" N.; long. 83° 2' E.), 4 km. south-west of Taulihawa, yielded pottery of the red ware. The sherds are affiliated to the pottery of Piprahwa both in shape and fabric. As at Piprahwa, some shapes of Kodan linger in this assemblage as well, but the look of the pottery here is, as at Piprahwa, fresher than that of Kodan. One of the sherds bears finger-nail incisions and another is cut into a disc.

Cooking-*hāṇḍīs* with a carinated and ridged waist are fairly common; one of the sherds has a partially-indented ridge. The following shapes of Kodan are found represented: *Ie* for bowls, *VIa*, *VIb*, *VII* and *VIII* for lids and *XXVIc* and *XXXIIId* for vases.

21. DOHNI (DISTRICT TAULIHAWA)

Near the village of Dohni (lat. 27° 32' N.; long. 83° 5' 40" E.), 4.8 km. east-south-east of Taulihawa, is a low unpromising mound (pl. CLI A) by the side of the Taulihawa-Lumbini road. The presiding deity is in the shape of a lump of clay, around which is a host of terracotta animals (pl. CLI B) offered by the local people.¹

The sherds on the surface are extremely limited in number. Entirely of the red ware, they are similar to the pottery of Piprahwa (p. 226). The decoration consists of triangular notches and oblique incisions. A few sherds have some resemblance, in shape alone, with *Types XXVIb*, *XXVIc* and *XXVII* from Kodan. Specimens of cooking-*hāṇḍīs* with a carinated and ridged waist are also available.

22. SIHOKHOR (DISTRICT TAULIHAWA)

To the north of the village of Sihokhor (lat. 27° 30' N.; long. 82° 59' 30" E.), 8.3 km. south-west of Taulihawa, is a low flattish mound, at one end of which is under worship *Sāmāi-māi* in the form of a *stūpa*-shaped lump of clay.

With the exception of a few sherds of the blackish-grey ware and a single sherd with a crackled greenish glazed surface which are ascribable to the Muslim period, the surface-pottery is of the red ware and closely resembles the pottery of Piprahwa (p. 226) in texture, shape and slip. Some of the shapes of Kodan found in the pottery of Piprahwa are available here as well. The decoration consists of incised zigzag lines, oblique incisions and slightly leaf-shaped impressed motifs.

Fragments of two terracotta tiles, a fragmentary disc of thick section (pl. CL, 3), a disc made of a sherd and the torso of a terracotta animal (pl. CL, 4) are the other antiquities. One of the two tile-fragments is moulded: at its two available corners is a quadrant of a flower within a border, all in relief (pl. CL, 6). The other tile-fragment, one of the sides of which takes a turn at right angles to the main body, is meant for the roof.

23. PARORA (DISTRICT BHAIRHWA)

Parora (lat. 27° 32' N.; long. 83° 13' 30" E.) is 9.3 km. north-west of Lumbini. To the south of the village-habitation were found quite a few sherds in the section made by a rain-gully on the bank of the Kothi. The deposit, which is nearly 60 cm. thick

¹ Almost every *kof*, which generally signifies an old deserted habitation-site, has a sacred spot, where is in worship a village-goddess, often in the form of a *stūpa*-shaped lump of clay and rarely a fragment of ancient sculpture. The offering to this folk-divinity consists of terracotta animal figurines, mostly of elephants and horses.

on an average and underlies an alluvial accumulation, is localized and goes back to the Muslim period. There is no sign of any ancient structures or mounds on the surface.

A major part of the sherds is of the glazed ware. These sherds have a terracotta core, red or greyish in colour and of medium or coarse fabric, and a crackled green or bluish-green glazed surface. The base of the coloured surface is a whitish gritty layer, sufficiently fused. Bowls, tumblers and plates alone are represented in this ware. Not a single vessel was found intact. Very few sherds even preserve the rim.

Sherds of the red ware represent a bowl or basin with a vertical flat-topped nail-headed rim and two types of vases with a globular profile, one with a splayed-out featureless rim and the other with an everted internally-thinning rim and a vertical neck.

A specimen of the medieval blackish-grey ware is furnished by a miniature *ghata* with a bottle-neck, a truncated convex profile and a flat base.

24. GOTIHAWA (DISTRICT TAULIHAWA)

In the midst of the village of Gotihawa (lat. $27^{\circ} 31' 30''$ N.; long. $83^{\circ} 1'$ E.), which is 4 km. south-west of Taulihawa, is the lower portion of the Aśokan pillar situated inside a brick-lined square pit (pl. CLH B) made during the Buddha-Jayanti celebrations. As, however, the bottom of the pit is much lower than the surrounding ground, there is an accumulation of rain-water inside the pit which has no outlet for the drainage of water. Consequently, the lowest part of the pillar remains under water throughout the year.

The extant stump, 3 m. 25 cm. high, stands *in situ* on a slab, 2 m. 13.3 cm. (north-south) by 1 m. 74 cm. (east-west). On this slab is an incised circle, 3 m. 25 cm. in circumference, inside which but not in the exact centre rests the stump. The circumference of the pillar is 2 m. 61.6 cm. and 2 m. 50.1 cm. respectively at a height of 25.4 cm. and 1 m. 82.9 cm. from the base. Unlike the Aśokan pillars at Lumbini, Sanchi, Sarnath and Delhi-Topra, the lower part (meant to be embedded) of which is rough and hammer-dressed,¹ it is finished from the very base. Further, there are four rough oblongs (about 20 cm. high in three cases and 25 cm. high in one case), two at a height of 1 m. 16.8 cm., one at 1 m. 18.1 cm. and the fourth at 1 m. 13 cm. from the base. Similar roughened squares, also four in number, are noticed only on the extant pillar of the Mauryan hall at Kumrahar.² The oblongs with rough surfaces were evidently intended as grips for the horizontal bars that spanned the interspaces between the pillars of the hall. The pillar of Kumrahar is also polished right down to the base. From these features it may be presumed that the pillar of Gotihawa at the time of its fashioning at the work-site (possibly at Kumrahar itself) was designed for a structure. The decision to transport it as a free-standing pillar was taken possibly when it was found to be in excess of the requirements.

¹ Marshall notes, 'All the Aśoka columns which I have examined are polished as far as the original floor level but rough-dressed below'. *An. Rep. Arch. Surv. Ind.*, 1912-13, p. 69, foot-note I.

² *An. Rep. Arch. Surv. Ind.*, 1912-13, pp. 69-70 and pl. XLVII b.

The stone of this pillar and that of the two fragments of the upper part of an inscribed Aśokan pillar that lie on the bank of the Nigali-sagar (p. 249) are identical. As already noted by P. C. Mukherji, the pillar of Nigali-sagar is not *in situ*. Traces of any ancient vestiges, not to speak of the *stūpa* of Kanakamuni which the pillar commemorated, are not in sight within the immediate neighbourhood. It was evidently brought from some other site. The possibility of the Nigali-sagar fragments forming part of the Gotihawa column cannot be entirely ruled out. The upper portion of the Gotihawa pillar is missing, but a major part of the bell-shaped capital is available. The corresponding lower part of the Nigali-sagar pillar and the capital are missing. The girths of the two fragments of Nigali-sagar are such that they can well be the upper portion of the Gotihawa pillar.

Adjoining the pillar is the Aśokan *stūpa*, utterly neglected. Not only stakes have been driven into it for fastening the cows, but the entire exposed part is being conveniently used for preparing cow-dung cakes (pl. CLII A). The *stūpa* was, no doubt, partially exposed in 1899, but it is very likely that the lower portion of the base is still intact.

25. DOHNI (DISTRICT TAULIHAWA)

Adjacent to Siwalwa is Dohni¹ (lat. 27° 27' N.; long. 83° 12' E.), which is 7.3 km. south-west of Lumbini. In this village were found fragments of two mutilated sculptures fixed on an earthen platform. According to the local people, they had been lying in this very spot even before the habitation started here, though a villager from Siwalwa attested to its recovery from the neighbouring well.

Of the two sculptures, one (pl. CLIII A and B) particularly deserves attention for its fine workmanship. Fashioned in the round, it represents a four-armed deity, possibly Vishṇu, standing in *sama-pāda*. Clad in a short *dhotī* (indicated by wavy lines) worn with a *kachchhā*, the image is decked in coiled armlets and an ornate necklace of two strings held by a central clasp. The partly preserved hair is arranged in ringlets. The face has been chipped off; the upper part of the head along with the crown (if any), the lower part of the legs and the major part of the arms are also missing. A fragment of the two left arms of the figure lies on the pedestal. It appears that the hanging lower left hand rested on one of the *āyudhas*. Around the head is a plain circular halo. Made of sandstone of slightly reddish variety, the sculpture (68.6 cm. high) is stylistically ascribable to the Gupta period.

The second sculpture (pl. CLIII C) is in several fragments, two larger pieces depicting respectively the lower part up to the thigh (47 cm. high and 50.8 cm. wide) and the bust (38 cm. high) of an image of Sūrya. Made of sandstone of greyish colour and poor brittle quality, the available portions of the image are badly weathered and defaced. The unfinished back side is mostly cut out of the back-slab. Standing in *sama-pāda*, the deity presumably held the stalk of a lotus in each hand. On the dexter is Piṅgala with an

¹ Mentioned by P. C. Mukherji in connection with Siwalwa (his Mahadeva). He did not notice any antiquities here.

EXPLORATIONS

inkpot, beyond whom is a defaced figure, Ūshā or Pratyūshā. On the sinister is evidently Daṇḍī, thoroughly defaced. Between the legs of Sūrya is the charioteer Aruṇa driving a team of seven horses carved on the pedestal.

On the earthen platform also finds place a small *pañcharatha* pedestal of sandstone.

Not far from the images is an old defaced *linga* placed inside the octagonal socket of a monolithic *arghya-paṭṭa*. The portion inside the *arghya-paṭṭa* is octagonal. This *linga* lies by the side of a large brick-lined old well mentioned above. The platform round the well is multi-faced and covered with a thick coat of lime-plaster like the inner face of the well.

26. SIWALWA (DISTRICT TAULIHAWA)

The site was noticed as early as 1899 when P. C. Mukherji visited the place.¹ The village, 8.3 km. south-west of Lumbini, is now called Siwalwa (lat. 27° 27' 30" N.; long. 83° 11' 30" E.) and not Mahadeva as mentioned by Mukherji.

Close to the village near its south-east corner and to the south of a modern temple known as Śivālaya, is a mound (pl. CLIV A) about 3 m. high. To its west is a large tank. Thoroughly covered by thorny jungle, the extent of the ruins does not appear to have been much. To presume from the dimensions of the mound and the brick-bats that lie on it, the mound represents the ruined plinth of a brick temple.

The pieces of the door-frame, noticed and sketched by Mukherji, have been covered by earth and jungle. The local people, however, pointed out the spots, which, on clearance, yielded the pieces.

The right door-jamb (pl. CLV A and B), reported to have been embedded by Mukherji, was also traced out. Made of sandstone (?) of greyish colour, it is 1 m. 69.5 cm. high and 35.5 cm. wide. At the base is Gaṅgā, with her right hand on her thigh, standing with pronounced flexions on a *makara*. By her left side is a *nāga*, also standing with flexions. Details of these two figures are not available due to their defaced state. The portion of the jamb above these figures is divided into facets, two being broad. The innermost facet is relieved with a succession of flowers—one circular alternating with a diamond-shaped one. Flanked on either side by a receding narrow facet with a vertical row of *champakā* flowers is the first broad facet. Its façade is boldly relieved with a scroll having leaves, flowers and possibly animals within the circular foils and birds outside the foils. The decoration of the next facet is similar to that of the innermost. The second broad facet beyond it is completely defaced. There are two sockets, one on the bottom and the other on the top, to receive the dowels which went into the sill and the lintel respectively. Of fair workmanship, it is ascribable to about the tenth century A. D.

¹ *Op. cit.*, pp. 41 and 42.

Sketched by Mukherji on pl. XXVI of his book under the title 'sculptured door, Dohni', the dexter jamb (pl. CLV C), 1 m. 70.2 cm. high, 35.5 cm. wide and 29.2 cm. thick, is similar to the right. The decoration on the second broad facet is preserved here; conch-shaped petals occur on the inner face, the façade being relieved with alternating round and diamond-shaped flowers. At the base of the jamb is Yamunā, her mount defaced beyond recognition. To her right is a standing male holding in his left hand a staff. These two figures are noted by Mukherji as 'a pair of husband and wife in amatory attitude'.

The sill (pl. CLVI A), 1 m. 71.5 cm. long, 39.4 cm. wide at the maximum point and 33 cm. high, is elaborately carved. In the centre is the thick stem of a lotus-plant, on either side of which and issuing from it is a scroll containing within a *harṣa* perched on a lotus-leaf. The wavy shoot in continuation of the scroll has within it a *makara* ridden by a pair of human figures. Beyond this at either extremity is a recumbent lion. On two sides and at the base of this composition is a band relieved with a row of flowers—circular alternating with diamond-shaped. On the top face of the sill are two sockets to receive the dowels which kept in position the jambs.

Two small fragments (pl. CLIV B) of the lintel alone were found. One, 63.5 cm. long, 30.5 cm. wide and 38.1 cm. high, of them is relieved with the *abhisheka* of Lakshmi by elephants on a projected inset in the centre, beyond which are the motifs found on the jambs. The figure on the inset of the other piece is too indistinct to be identified.

The sixth slab (pl. CLVI B), 87 cm. long, 29.2 cm. wide and 15.2 cm. high, possibly served as a step to the sill. On its front face, between two semicircular curves, is an indistinct motif flanked by a conch on either side.

27. SAGRAHAWA (DISTRICT TAULIHAWA)

The ancient ruins were located on the west and south banks of a large tank called Sagar (lat. 27° 36' 50" N.; long. 83° 5' 30" E.), which is 8.3 km. north-east of Taulihawa. The place is now claimed by forest. Series of depressions mark the sites of seventeen small brick structures removed by A. Führer. In the middle of the ruins of an impressive structure—the *stūpa* of Mahānāman with attached monastery according to Führer and *stūpa* attached to a cruciform monument according to P. C. Mukherji—exists a large pit also made by Führer in search of relics.

Führer's report¹ on this destructive excavation is not merely meagre but full of fabrications. It is entirely due to P. C. Mukherji, who took pains to bring on record² whatever information that could be gathered from Führer's draftsman, Bhairava Buksh, that one gets a picture of this interesting site.

¹ *Progress Report, Archaeological Survey, N.-W. P. and Oudh Circle, 1897-98*, pp. 1 and 2.

² P. C. Mukherji, *op. cit.*, pp. 25-28 and pls. VIII-XIII.

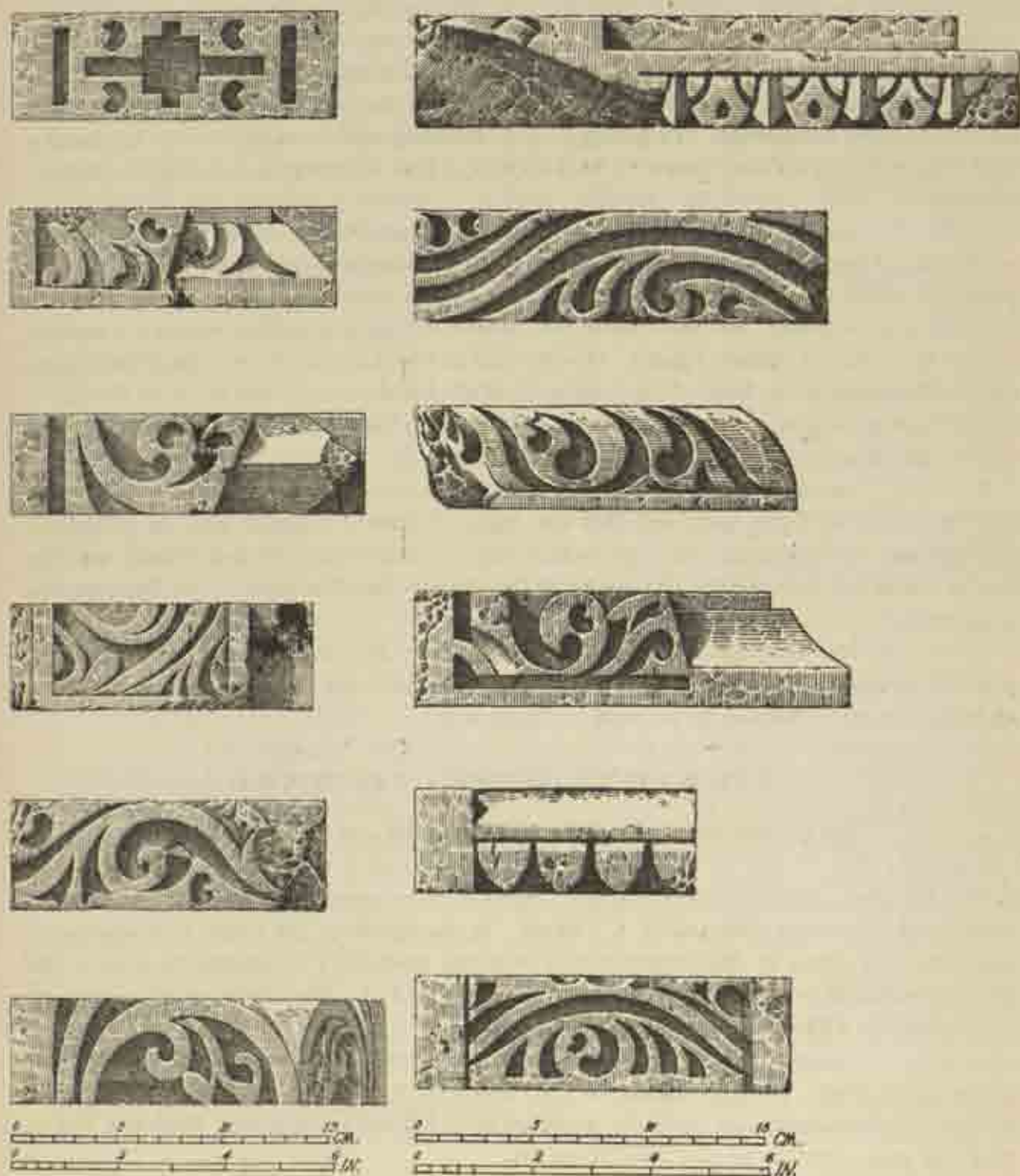


FIG. 38. Sagahawa: carved bricks of Structure 2

Führer identified the site as the place of the massacre of the Śākya and the seventeen square brick structures, which he demolished down to their foundations, as *stūpas* containing the ashes of the Śākya heroes whose names he claimed to have found written in pre-Aśokan characters variously on the caskets, lids and bricks of the so-called relic-chambers. V. A. Smith made a great service to archaeology by exposing in time the fabrications of Führer in respect of the alleged inscriptions.¹ Both V. A. Smith² and P. C. Mukherji³ were, however, in favour of Führer's identification of the site with the place of the massacre of the Śākya. They also regarded those seventeen structures as *stūpas*, as several of them yielded some precious objects, like gold and silver pieces including *nāgas*, flowers and leaves and semiprecious stones, usually deposited within vases. These vases were mostly found buried in the ground immediately below the central brick, carved with a lotus, of the bottom course of the foundation-brickwork. Whether they actually contained ashes or bones as reported by Führer does not appear to have been ever verified,⁴ as P. C. Mukherji had no chance to see the deposit, and V. A. Smith, who once paid a visit when the excavation was in progress, only remembered to have seen a few gold stars in the small metal caskets found on that particular day. In case these vases did not contain ashes and bones, there will be little justification for identifying these structures with Buddhist *stūpas*, as the site, which evidently once nourished a flourishing religious establishment, did not produce any antiquity specifically Buddhist and there are textual prescriptions⁵ for the deposit of precious things (*ratnanyāsa*) in the foundations of temples. The deposit of *kumbhas* (vase) or *nidhi-kumbhas* within the foundations of temples is also attested by several texts.⁶

Even these seventeen structures are regarded as *stūpas*, it is difficult to agree with regard to their supposed early date, as *stūpas* with such high square bases are not met with in the pre-Christian period. The carved bricks⁷ (fig. 38) of the façade of the so-called Stūpa 2 were essentially similar to those of Temple 1 of Kodan. Further, the plan of the largest structure—the *stūpa*-monastery of A. Führer—was too analogous to that of Temple 2 of Kodan to have been far anterior to the latter temple. Temple 1 of Kodan,

¹ *An. Prog. Rep., Arch. Surv., North-Western Provinces and Oudh Circle* for the year ending 30th June 1899, pp. 1 and 2.

² *Prefatory Note* to P. C. Mukherji's *A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal*, p. 13.

³ P. C. Mukherji, *op. cit.*, pp. 54 and 55.

⁴ An examination of these vases and their contents, which were handed over to the representative of the Nepal Government, is necessary to clear this point.

⁵ *Viśvakarma-vastuśāstra*, ed. K. Vasudeva Sastri and N. B. Gadre (Tanjore, 1958), pp. 41 and 42 (*devālaye daivagārbhe ratnanyāso viśeshataḥ | daivavastuśu sarveshu sauvarṇam bhājanam śubham ||*); Thakkura Pheru's *Vastusāra-prakarana*, tr. Bhagwandas Jain (Jaipur, 1936), p. 18, verse 27.

⁶ *Viśvadharmottara-purāṇa*, 3rd. *khaṇḍa*, ed. Priyabala Shah (Baroda, 1958), pp. 266 and 267; *Aparājita-pricchā*, ed. P. A. Mankad (Baroda, 1950), p. 375 (*Sūtra* 153, verse 18); *Dīpāṇava*, ed. P. O. Sompura (Palitana, 1960), pp. 177 and 180; *Viśvakarma-prakāśa*, *adhyāya* VI, verses 34-37.

⁷ Gathered from the drawings of Bhairava Bhusb, Führer's draftsman.

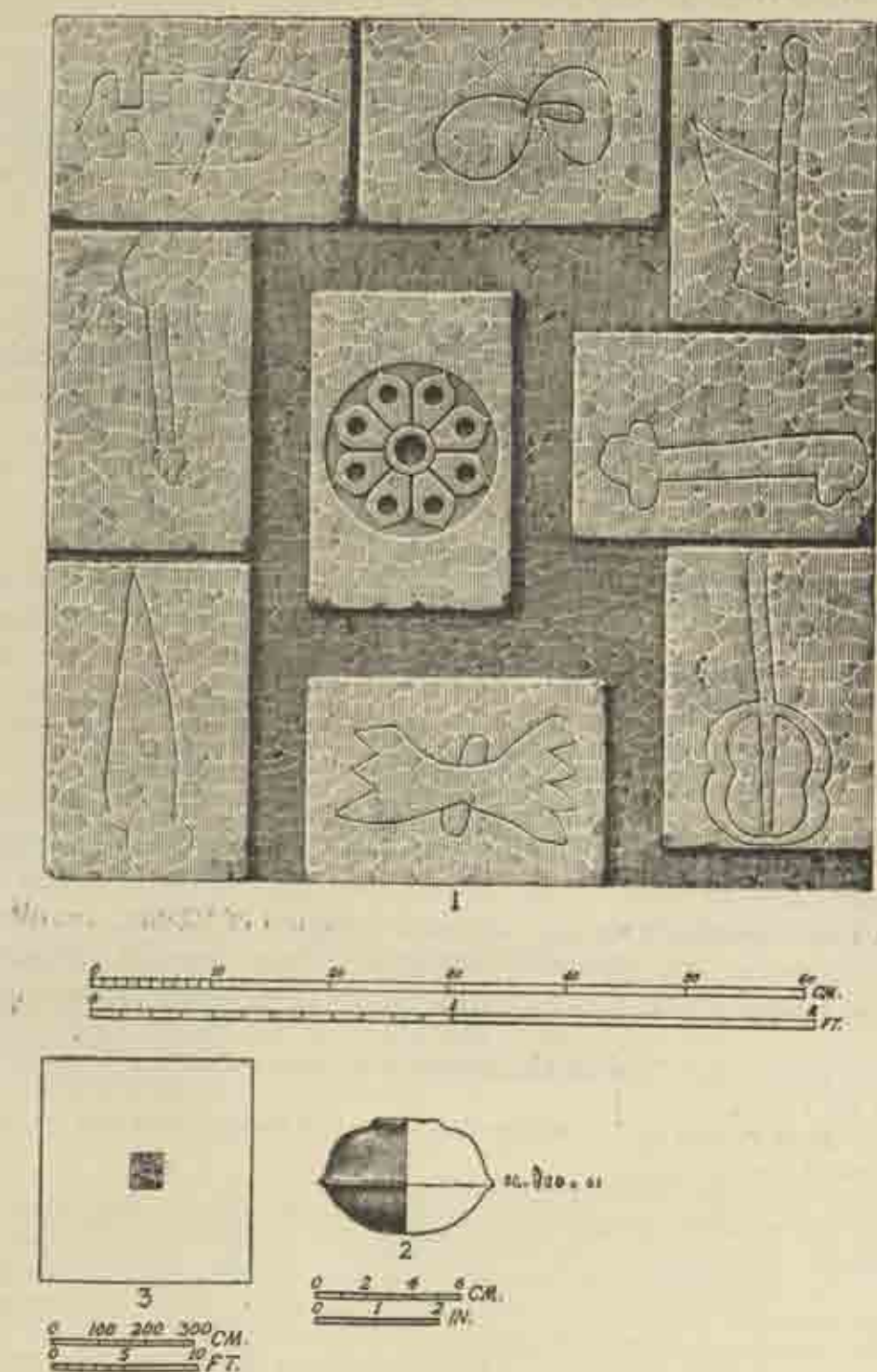


FIG. 39. Sagrahawa: 1, bottom layer of bricks of Structure 8; 2, copper vase found beneath the central brick of 1; 3, key-plan of Structure 8

too, conforms with this structure so far as the attached complex of cells is concerned. In all probability this particular structure of Sagrahawa was a temple whatever its religious affiliation might have been.

The most singular feature about the demolished structures is the representation of several symbols on bricks, usually of the bottom course of the foundation. V. A. Smith found a justification in these motifs for regarding the site as 'the supposed scene of the slaughter of the Śākya', as many of them represent weapons and indicate 'that the persons whose cremation is commemorated fell in battle'.¹

These bricks with symbols call for a detailed study. For, it is not unlikely that similarly-carved bricks exist in the foundation of other structures including those of Kodan about which one will perhaps never know, as the modern method of excavation is totally different from what had been ruthlessly followed by Führer. Further, these finds, as will be shown below, furnish a material corroboration to the prescriptions of the ancient architectural texts. All the available drawings,² including the four already published by P. C. Mukherji in his book, are illustrated here even at the risk of some repetitions not only for their intrinsic value to the students of ancient architecture but the rarity of the book itself.

Analysing the patterns from the available report of P. C. Mukherji and drawings of Bhairava Buksh, it appears that the lotus formed the most important motif. For, out of the thirteen small structures which yielded the so-called relics or caskets, twelve (Structures 1, 2, 3, 5, 6, 8, 9, 10, 12, 13, 14 and 15) had vases immediately below the brick carved with a lotus and the remaining one (Structure 4) bore the precious deposit within the central socket (covered by a lotus-marked leaf) of the lotus-marked brick itself. Further, the brick with the lotus invariably occupied the central place in the assemblage of bricks bearing symbols. Evidently, it served as the foundation-brick (the pivotal foundation-brick when in a group of carved bricks), a presumption supported by architectural texts. Thus, the *Śilpi-poṭhi*, an Oriya manuscript,³ enjoins the laying of the foundation-stone carved with a lotus having a pistil and eight petals pointing towards the eight directions. In this connexion it may be noted that the represented lotus on the bricks of Sagrahawa is almost invariably eight-petalled. The portrayal of the lotus on a part of the central foundation-stone (or brick), called *dharaṇī* or *kūrma-śilā*, of an assemblage of nine is also referred to in the *Aparājita-prcchā*.⁴ According to the *Viśvakarma-prakāśa*, lotus-marked stones bestow success.⁵

¹ Prefatory Note to P. C. Mukherji's *A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal*, p. 13.

² Produced by Bhairava Buksh, they are now in the custody of the Superintending Archaeologist, Archaeological Survey of India, Northern Circle, Agra.

³ Nirmal Kumar Bose, *Canons of Orissan Architecture* (Calcutta, 1932), pp. 62 and 63.

⁴ P. 374 (*Sūtra* 153, verses 11 and 13).

⁵ *Svastikā vedikā-yuktā nandāvart-āṅka-lāñchhitāḥ // Padm-ādi-lakṣaṇa-opetāḥ śilāḥ sarv-ārtha-siddhidāḥ* / *Adhyāya VI*, verses 22 and 23.

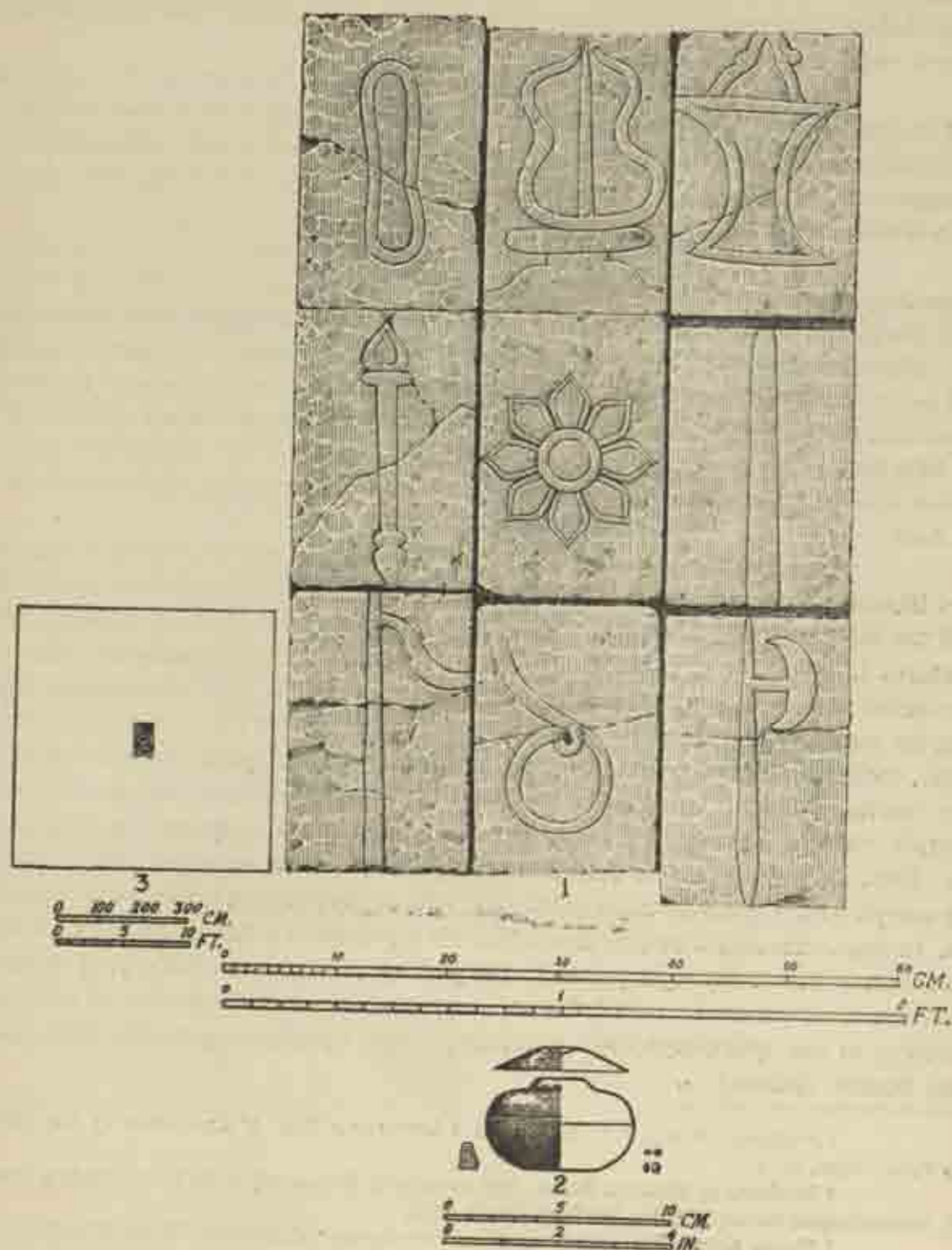


FIG. 40. Sagahawa: 1, bottom layer of bricks of Structure 9; 2, copper vase with lid and contents found beneath the central brick of 1; 3, key-plan of Structure 9

The lotus-marked bricks occurred singly in Structures 3, 4, 6, 10, 12 and 14 and in the assemblage of bricks in Structures 2, 5, 8, 9, 13 and 15, all these cases being either the bottom brick or the bottom course. In Structure 1 the brick with the lotus lay above the central plain brick of the bottom course of five bricks, of which four bore motifs. In Structure 10, above the bottom brick carved with a lotus, were two more courses of bricks with symbols.

The maximum number of bricks with motifs in one layer was nine occurring in Structures 8 and 9. In both, the nine oblong bricks formed the bottom course of the foundation. One of these bricks was in the centre and the rest were arranged round it, the layout of the assemblage in Structure 8 being square and in Structure 9 oblong. The copper vase (fig. 39, 2 and fig. 40, 2) with unspecified objects underlay the central brick. The middle part of the central brick represented a lotus with eight petals pointing towards the eight directions, as enjoined in the *Śilpi-poṭhi*, while the eight peripheral bricks bore the *āyudhas*, evidently of the *dikpālas* (guardians of the eight quarters). The *āyudhas* (fig. 39, 1) depicted in Structure 8 (fig. 39, 3) are the characteristic attributes of the eight *dikpālas*. Starting from the bottom middle (which apparently marked the east side) and going round clockwise one comes across a *vajra* (thunderbolt) of Indra (the lord of the east), a *śakti* (spear) or flame of Agni (south-east), a *daṇḍa* (cudgel) of Yama (south), a *khaḍga* (sword) of Nirṛiti (south-west), a *pāśa* (noose) of Varuṇa (west), a *dhvaja* (banner) of Vāyu (north-west), a *gadā* (mace) of Kubera (north) and a *triśūla* (trident) of Iśāna (north-east). In Structure 9 (fig. 40, 3) not only was the mode of the representation of the *āyudhas* dissimilar to that of the *āyudhas* in Structure 8, but the attributes depicted on the bricks of the directions of Nirṛiti and Iśāna were altogether different. Commencing with the top middle and going clockwise the *āyudhas* are a trident-like half-*vajra* on a pedestal, fire on an altar, a plain *daṇḍa*, a *paraśu* (battle-axe), a *pāśa*, a stylized *dhvaja* resembling an *aṅkuśa* (elephant-goat), a *gadā* and an elongated loop-like object (fig. 40, 1). An analogous arrangement of stones or bricks in foundation is laid down in several architectural texts. According to the *Aparājita-prechā*,¹ the *Kṣhīrārṇava*² and the *Dīpārṇava*,³ the foundation-stones (or foundation-bricks in the case of brick structures) should be nine, of which one, called *dharaṇī* (also known as *kūrma-śilā*), should be in the centre and the rest in the eight directions. The direction from which the laying of the stones should be commenced is also prescribed in most of the texts. The *Prāsāda-maṇḍana*, for instance, suggests Iśāna-koṇa (north-east) or Agni-koṇa (south-east).⁴ One of the texts quoted by N. M. Sompura in his compilation called *Śilparatnākara*⁵ prescribes not only Agni-koṇa for the first stone to be laid but also the representation of the

¹ P. 375 (*Sūtra* 153, verse 15).

² Ed. by P. O. Sompura (Palitana, 1967), pp. 42-46.

³ P. 179 (*Adhyāya* XII, verse 13).

⁴ P. 17 (*Adhyāya* I, verse 28).

⁵ (Dhṛangadhra, 1939), pp. 61 and 62.

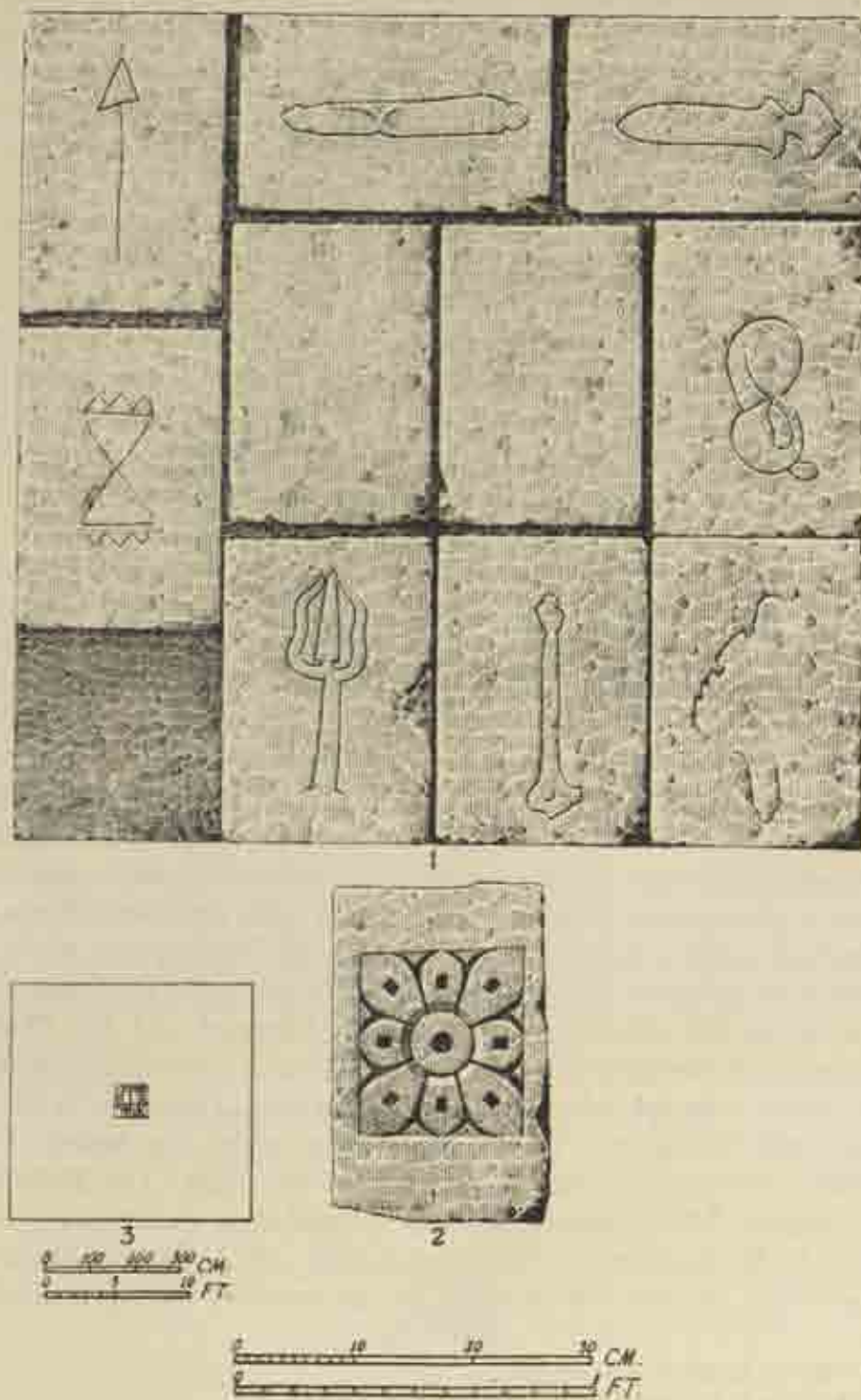


FIG. 41. Sagrahawa: 1, bottom layer of bricks of Structure 6; 2, lotus-carved brick below 1; 3, key-plan of Structure 6

āyudhas on the eight peripheral stones. Beginning with the Agni-koṇa these *āyudhas* are a *śakti* (south-east), a *daṇḍa* (south), a *khaḍga* (south-west), a *pāśa* (west), an *aṅkuśa* (north-west), a *gadā* (north), a *triśūla* (north-east) and a *vajra* (east). P. O. Sompura, in one of his editorial foot-notes,¹ says that the Sompura Śilpīns have a tradition to carve the *āyudhas* of *dikpālas* on the eight peripheral stones (which should be covered with pieces of cloth according to the colour of respective *dikpālas*), the *vajra* being on the eastern stone, *śruva* (sacrificial ladle) on the stone of the Agni-koṇa, *daṇḍa* on the southern stone, *khaḍga* on the stone of the Nirṛiti-koṇa, *pāśa* on the western stone, *dhvaja* on the stone of the Vāyu-koṇa, *gadā* on the northern stone and *triśūla* on the stone of the Īśāna-koṇa. He has also given a diagram showing the layout of these nine foundation-stones.² This diagram and two others, one published in the *Śilparatnākara*³ and the other in Bhagwandas Jain's edition of the *Prāsāda-maṇḍana*,⁴ bear a similarity to the arrangement found in Structures 8 and 6, particularly in respect of the *āyudhas*. The *āyudhas* in these diagrams, though differing in their mode of representation, are identical with the exception of the ones at the directions of Agni and Vāyu, the *āyudhas* of these two particular directions being a sacrificial ladle and a banner respectively in the diagram of the *Dīpārṇava*,⁵ a *śakti* and a banner in that of the *Prāsāda-maṇḍana* and a *śakti* and an *aṅkuśa* in the diagram of the *Śilparatnākara*. The eight *āyudhas* of Structure 8, thus, correspond to those of the *Prāsādamaṇḍana*.

In Structure 6 (fig. 41, 3) there appears to have been a single brick carved with a lotus (fig. 41, 2) at the extreme bottom, over which was a layer of ten bricks, the two central being plain. The *āyudhas* (fig. 41, 1) on the eight peripheral bricks were similar to those of Structure 8, but the manner of their depiction is somewhat different. The stylized representation of the *vajra*, presumably on the eastern brick, was in the form of two triangles meeting each other at the apex, their base having three mild prongs each. On the south-eastern brick was a *śakti* which, with its long staff crowned by a triangle, resembles an arrow. Below the lotus-marked brick was a copper vase.

In the light of the above, it is difficult to accept Smith's interpretation of the weapons on the bricks. These special bricks evidently formed the foundation-bricks⁶ laid in conformity with the injunctions of the *Vāstu-śāstras* with regard to the *iṣṭikā-nyāsa*. In case the so-called relic-caskets did not contain the bones, they were *nidhi-kumbhas* as

¹ *Dīpārṇava*, p. 177.

² *Ibid.*, p. 179; also *Kṣhīrārṇava*, p. 43.

³ P. 63.

⁴ P. 19. This diagram is identical with the one published on p. 97 of Bhagwandas Jain's edition of Thakkura Pheru's *Vāstusāra-prakaraṇa*.

⁵ The drawn *āyudha* on the northern stone looks like an *aṅkuśa*, though P. O. Sompura specifies *gadā* in his note.

⁶ Foundation-stone has been prescribed for stone structures and foundation-brick for brick structures; cf. *Sailaje śailajā kāryā kṣhīṭike ch-ṣṭīkāmayi* (*Aparājītapreṣṭhā*, Sūtra 153, verse 13).

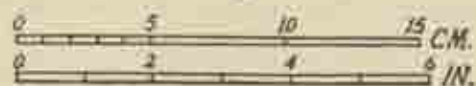
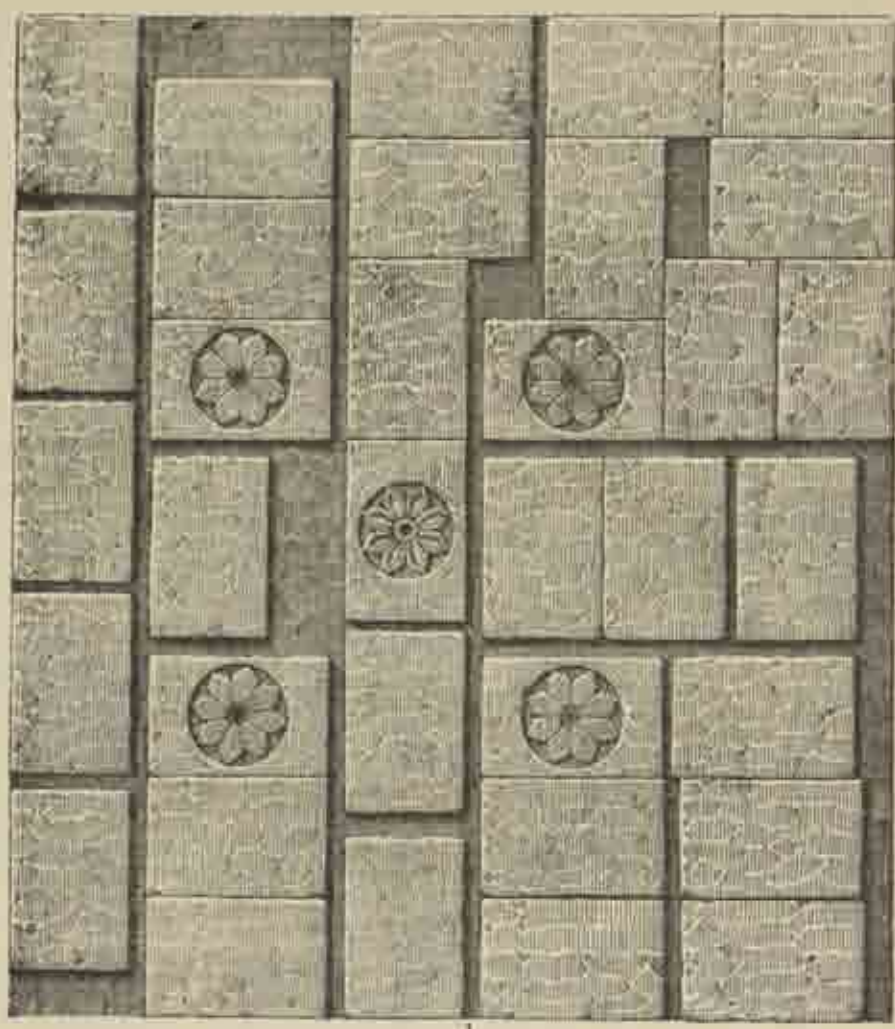


FIG. 42. Sagrahawa: 1, bottom layer of bricks of Structure 5; 2, copper vases found below the lotus-carved bricks of 1

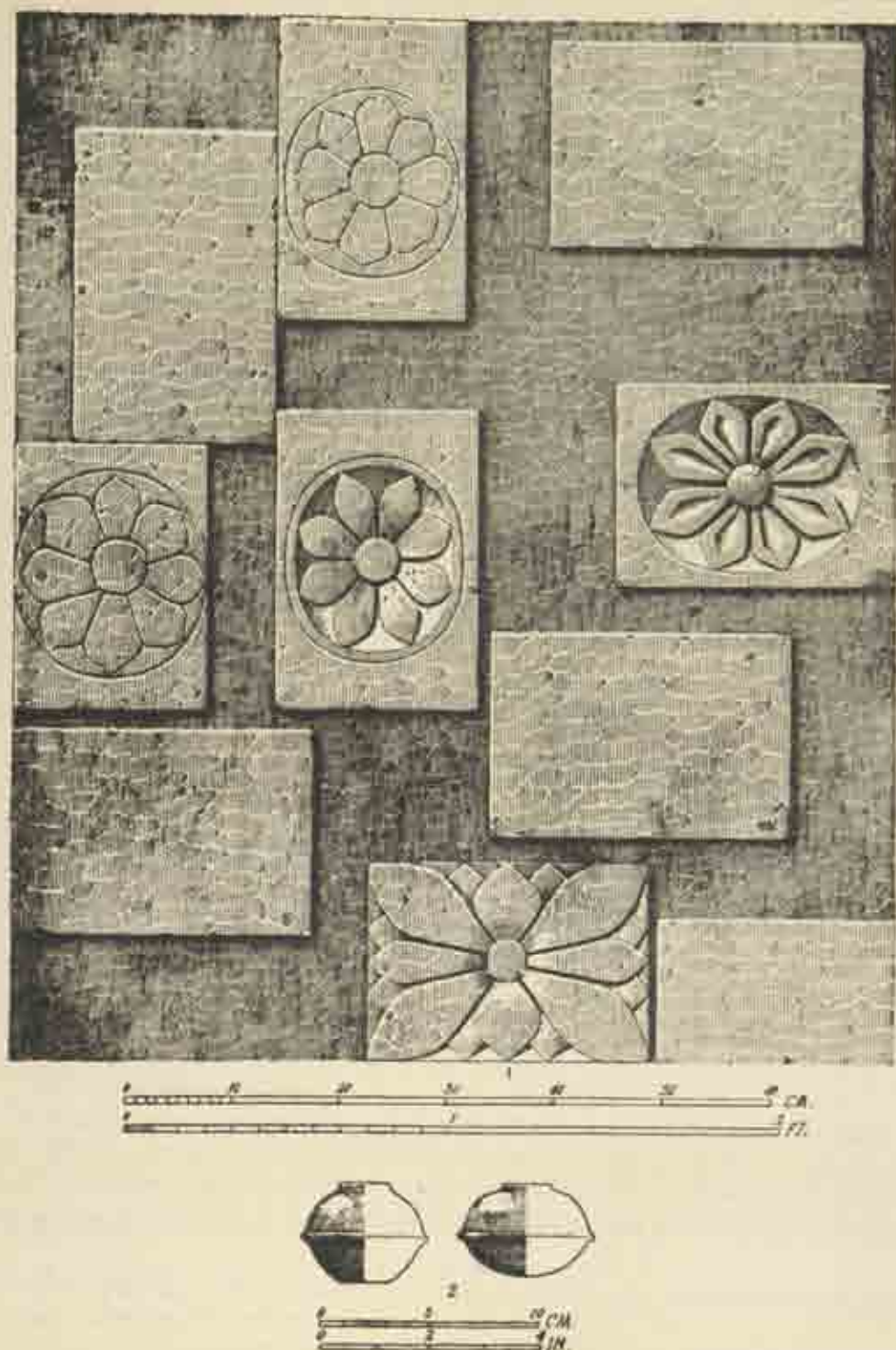


FIG. 43. Sagrahawa: 1, bottom layer of bricks of Structure 15; 2, two of the vases found below the lotus-carved bricks of 1

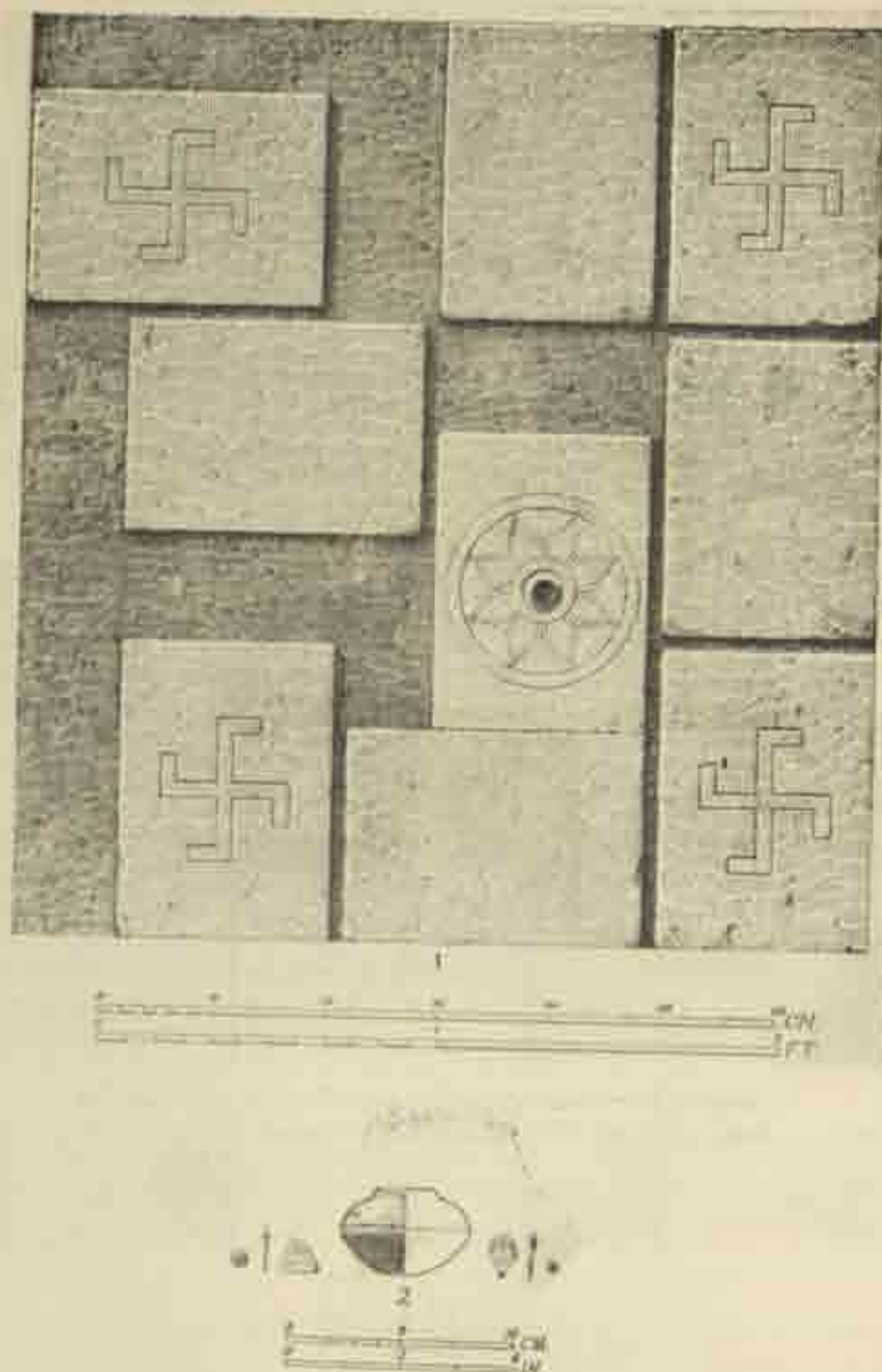


FIG. 44. Sagrahawa: 1, bottom layer of bricks of Structure 2; 2, vase with its contents found below the lotus-marked brick of 1

prescribed by several texts (p. 233, fn. 6). The deposit of the gold and silver serpents within some of these *kumbhas* seems to be significant. Did these serpents represent *vāstu-nāga* or *Vāsuki*, the regent of the nether region? P. O. Sompura's statement on page 178 of his edition of the *Dīpāṇava*¹ is noteworthy in this connexion. According to it, before laying the foundation-stones, a small pit of the size of the copper *kumbha* to be placed within should be dug. Within the pit should be installed first a *nāga* (snake) or a *kūrma* (tortoise) of either copper or costlier metal (*uchcha-dhātu*) and next a small copper *kumbha*. After depositing a variety of objects, including rice,² *pañcha-ratnas* and *śreṣṭha-dhātu*, within the *kumbha*, its mouth should be secured by a copper lid. Over this *kumbha* should be laid the foundation-stones. Of the objects (fig. 45, 6) found inside the socket of the lotus-marked brick of Structure 4, one definitely represents a serpent (*nāga*) and another looks like a tortoise (*kūrma*).

That there were different traditions about the layout of the foundation-bricks is suggested by the various *ishṭikā-nyāsa* of these structures. In Structure 5, the bottom layer (fig. 42, 1) consisted of thirty-four bricks, of which the five lotus-carved bricks were arrayed in a quincunx—one in the centre and the rest in the south-east, south-west, north-west and north-east directions. Below each of them and covered by a lid was a small copper vase (fig. 42, 2) with some deposit including gold stars.³ Structure 15 had in the lowest layer ten bricks, five of them having the carving of a lotus (fig. 43, 1); below lotus-marked bricks were copper vases⁴ (fig. 43, 2) with some deposit.

Structure 2 had in the bottom layer (fig. 44, 1) of nine bricks four *svastikas*, one each on four corner bricks and a lotus on the central brick, below which was a vase (fig. 44, 2) with two silver *nāgas* and four pieces of silver and gold. Four bricks, each with a *svastika*, occurred in the bottom layer (fig. 45, 1) of five bricks⁵ of Structure 1 also, but here the central brick was uncarved and bore a central circular socket on the upper surface (fig. 45, 2); within the socket of the plain brick was the vase, over which was a lotus-carved brick (fig. 45, 3). Inside the vase was a gold leaf (fig. 45, 8). *Svastika* is one of the several symbols prescribed in verse 14 of *Sūtra* 153 of the *Aparājita-prcchā*⁶ and in verse

¹ Also *Kshīrāṇava*, p. 45.

² The contents of the earthenware vase found within the so-called *nūpa*-monastery consisted of, according to A. Führer, some grains of rice, pieces of a pale greenish crystal, a garnet, a ruby, two triangular bits of gold and silver, two gold *nāgas* and pieces of black and white talc. The lid of the casket was of copper.

³ *An. Prog. Rep., Arch. Surv., N.W. Provinces and Oudh Circle* for the year ending 30th June 1899, p. 2.

⁴ Five according to the writings on the drawing of Bhairava Būkh who drew only two of them. P. C. Mukherji mentions two caskets.

⁵ Verse 12 of the twelfth *adhyāya* of the *Dīpāṇava* bears testimony to this arrangement of five foundation-stones. It also furnishes the names of these five stones and the five *nūlās* or *nūlī-kumbhas* that are to be deposited below these stones.

⁶ P. 374.

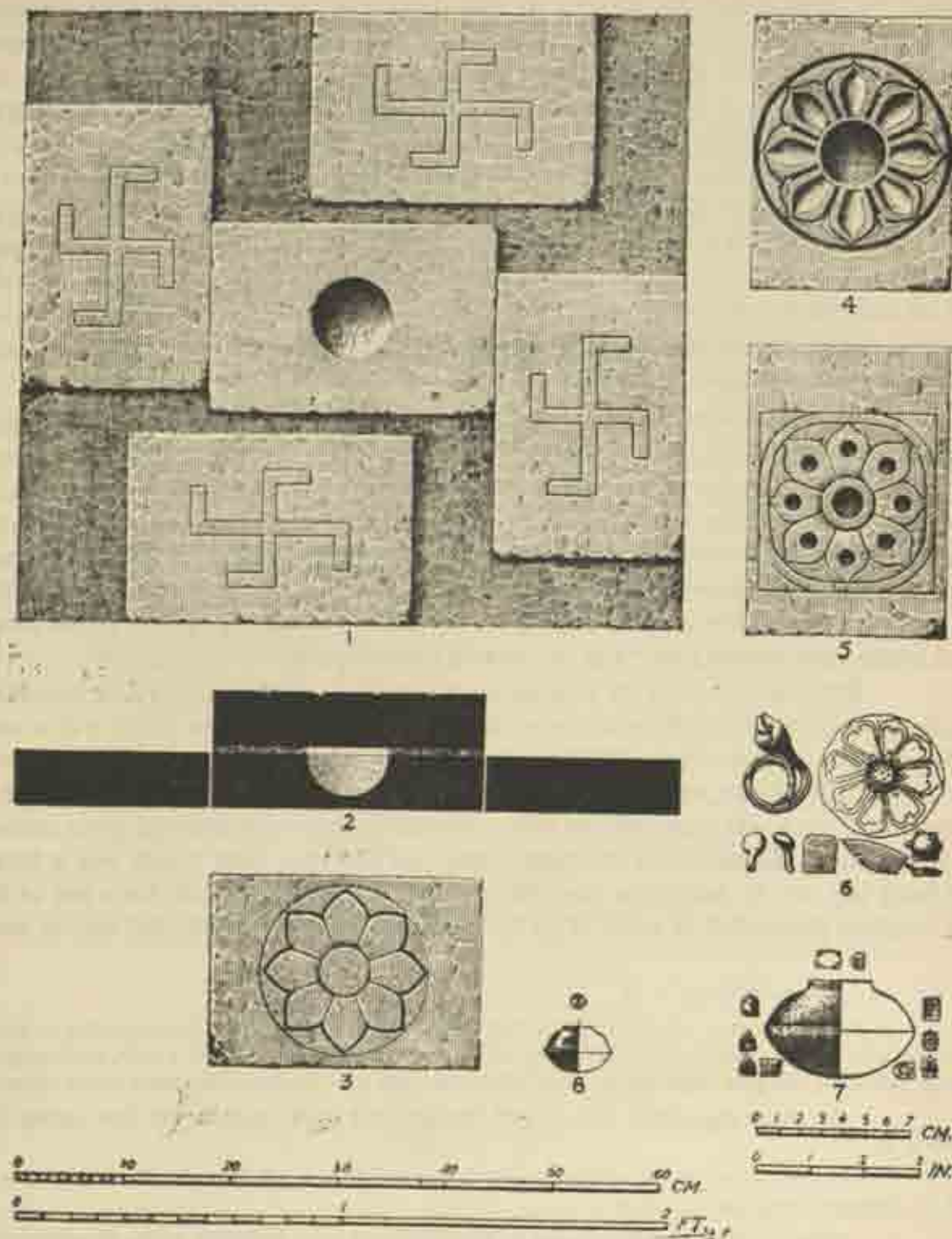


FIG. 45. Sagrahawa: 1, bottom layer of bricks of Structure 1; 2, section of bricks covering vase in Structure 1; 3, lotus-carved brick overlying vase of Structure 1; 4, vase of Structure 1; 4 and 6, lotus-marked brick of Structure 4 and objects found in the hollow centre of the lotus-marked brick of the structure; 5 and 7, lotus-marked brick of Structure 3 and vase with contents found below the lotus-marked brick of the structure

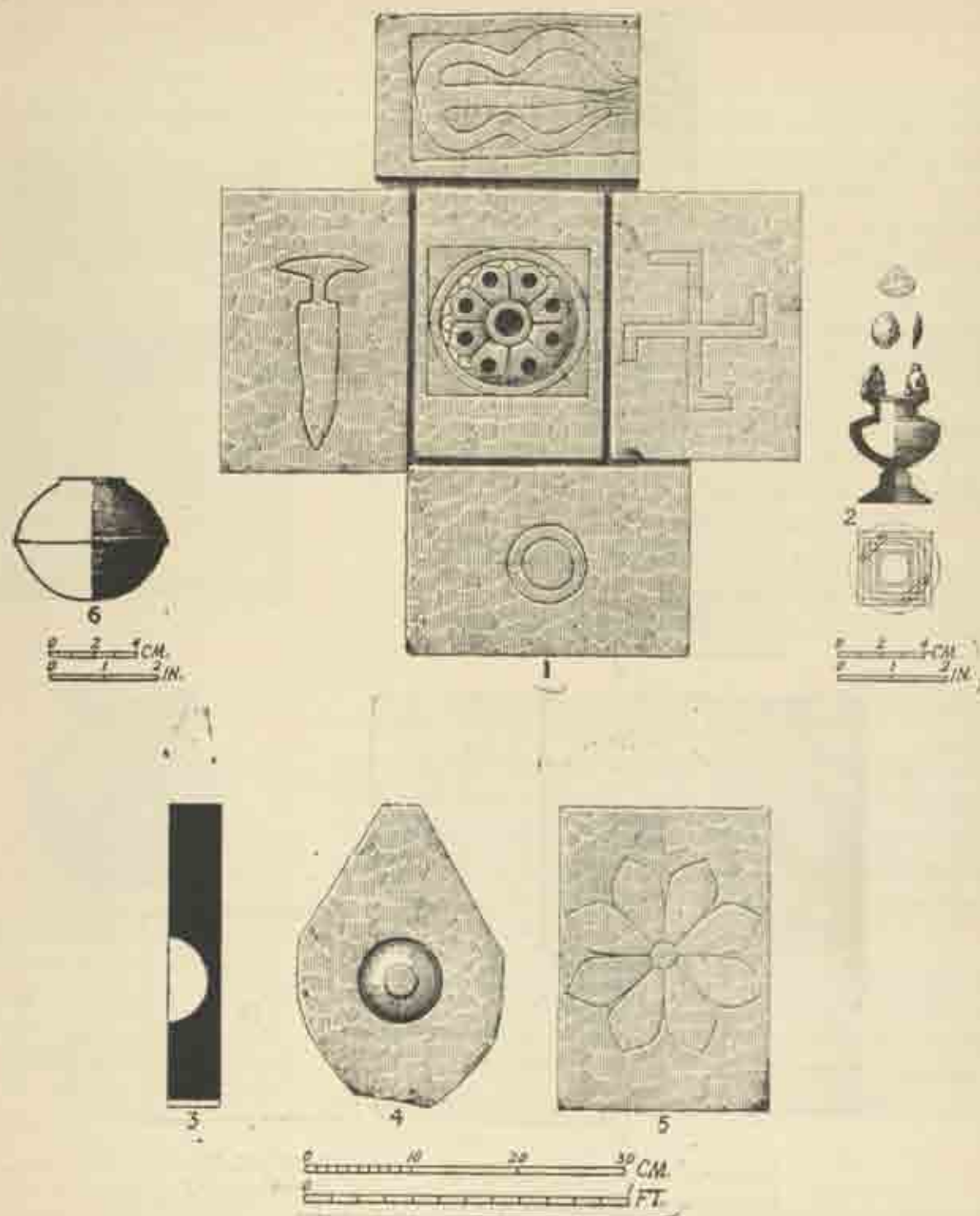


FIG. 46. Sagrahawa: 1, bottom layer of bricks of Structure 13; 2, bronze footed vessel found below the lotus-marked brick of 1; 3 and 4, section and plan of the polygonal brick of Structure 14, which held a copper vase in its central socket; 5, lotus-marked brick overlying the copper vase of Structure 14; 6, copper vase in Structure 14

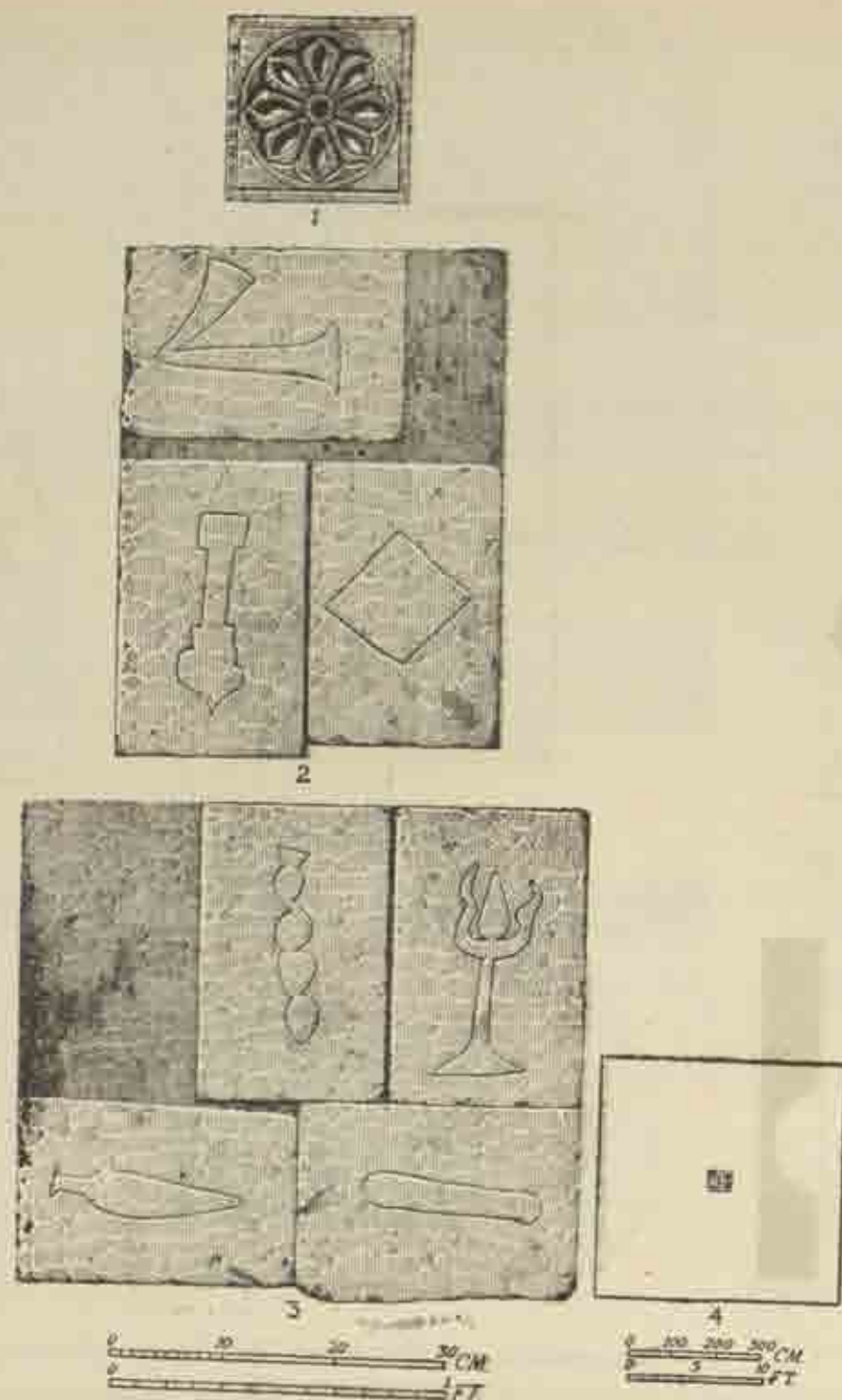


FIG. 47. Sagrahawa: 1, lotus-carved brick overlying the copper vase of Structure 10; 2, layer of bricks over 1; 3, layer of bricks over 2; 4, key-plan of Structure 10

22 of the sixth chapter of the *Viśvakarma-prakāśa*.¹ According to the latter, the stone marked with this symbol gives success.

The bottom layer (fig. 46, 1) of Structure 13 had five bricks—the central one with a lotus, below which was a bronze footed vessel (fig. 46, 2) and the four outer ones with a *svastika*, a trident, a dagger and a disc. The vessel contained three unspecified objects.

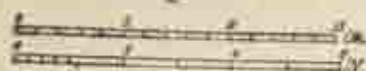


FIG. 48. Sagrahawa: 1, lotus-marked brick of Structure 12 which covered three vases; 2, one of the vases found below 1

In Structure 10 (fig. 47, 4) the marked bricks were arranged in three layers. The bottom layer had a single square brick carved with a lotus (fig. 47, 1), underneath which was a copper vase with two gold leaves. The middle layer consisted of three bricks: one of the marks was a diamond-shaped incision and the other two had a remote resemblance with a spear and a banner (fig. 47, 2). The third layer of four bricks (fig. 47, 3) had a *daṇḍa*, a *khadga*, a *gadā* and a *triśūla*, the *āyudhas* respectively of Yama, Nirṛiti, Kubera and Īśāna.

The copper vase (fig. 46, 6) in Structure 14 lay within the circular socket (fig. 46, 3) of a multi-sided brick (fig. 46, 4) and was covered by a lotus-marked brick (fig. 46, 5).

Structure 3 yielded, below a lotus-marked brick (fig. 45, 5), a vase with ten unspecified objects (fig. 45, 7). In Structure 12 three vases (fig. 48, 2) underlay a brick relieved with a lotus (fig. 48, 1). The central cavity of the lotus-marked brick (fig. 45, 4) of Structure 4 was covered by an eight-petalled lotus in a leaf. Within the hole were a *nāga*, a *kūrma* (?) and five other unspecified objects (fig. 45, 6).

The wide variety in the layout of the foundation-bricks at Sagrahawa might not have been entirely due to different Śāstric injunctions. Perhaps all the structures were not contemporaneous, a presumption partially supported by the difference in the shape of the *āyudhas* and the lotus.

¹ P. O. Sompura in the foot-note 1 on p. 176 of the *Dipāṇava* relates that different books have different prescriptions on the *ākṛitis* to be represented on the *kūrma-līlā* (central one) and the eight peripheral stones of the foundation. He cites, for instance, the *Viśvakarma-prakāśa*, where *kūrma*, *nāga*, Janārdana and Śrī-Dhruva are prescribed for the stones of the cardinal directions and *svastika* for the stones of the centre and *vidiśās* (intermediate directions).

28. CHATRADI (DISTRICT TAULIHAWA)

Chatradi (lat. 27° 35' 20" N.; long. 83° 2' 40" E.), locally called Chitradei, is situated on the right bank of the Banganga and 2 km. north-west of Tilaura-kot. The ancient site is now a dense forest which covers most of the ruins (pl. CLVII A). Though the structures, noticed and exposed by P. C. Mukherji, could be located, the plan and facing could not be discerned in the present amorphous ruins of bricks and brick-bats without further clearance. At the sacred spot of Chitradei (Chitrā-devī) was found, amidst the offerings of modern terracotta animal figurines, a mutilated image of Vishnu.

The structures exposed by P. C. Mukherji are not earlier than the first period of Temple I of Kodan. From his drawing¹ of the largest temple, it is clear that the temple had in front of the sanctum and attached to it a complex of cells with an arrangement roughly analogous to that of the temples at Kodan.

29. PATNA (DISTRICT TAULIHAWA)

Patna (lat. 27° 31' N.; long. 82° 46' 30" E.) is 2.4 km. north-north-west of Krishnanagar (Jhandainagar) and 27.5 km. west-south-west of Taulihawa. Here an image of Gaṅgā was said to have been unearthed a few years back at a depth of 30 cm. below surface. The spot pointed out to the author by the local people is right in the field where ancient vestiges are absolutely lacking. The possibility of the image having been brought from some other site, thus, cannot be entirely ruled out.

The image (pl. CLVII B), made of blackish stone (basalt ?), is 72 cm. high without tenon (81.2 cm. high with tenon). It is in a perfect state of preservation. The back portion of the figure (excluding the head) is cut out of the back-slab, which is inconspicuously pointed at the crown. But for the proper left foot which is unnaturally contorted, the image is rather well-modelled and remarkable for its sharp features. The provision of the tenon points to the possibility of the image having once been installed within a sanctum. Certain features of the image are reminiscent of the Pāla art-tradition, while others are indicative of a much later date; the image, thus, presents the impression of its being a copy of an older image of the Pāla period.

Standing gracefully with flexions on a *makara*, Gaṅgā is draped in a long *sāḍī* clinging fast to the legs and held by a girdle with wavy loops and pendants issuing from flower-shaped clasps. A folded scarf, encircling the back side of the shoulder and passing over the upper part of the arms, reaches as far down as the feet. Decked in a long *hāra* with a plain band flanked on either side by a row of elongated beads, a broad necklace with a long pendant ending in a bud, bracelets (one on each wrist), armlets, *kuṇḍalas* and anklets, the river-goddess, with knotted hair artistically displayed above her left

¹ P. C. Mukherji, *op. cit.*, pl. VI.

shoulder, carries in her raised right palm a beautifully-modelled conch, her hanging left hand holding the scarf.

Her face with half-closed eyes is benignly placid.

She is flanked on either side by a four-armed standing male figure. The dexter one, slightly pot-bellied and with three heads visible, holds in its lower left hand a trident, upper left a manuscript, upper right a snake and lower right a skull-cup, the last held against the chest. Clad in a short *dhoti* with folds indicated by lines, it is bedecked with beaded bangles, beaded armlets, a beaded *hāra* and a long conical *jaṭā-mukuta*. The central head wears moustache and frizzled beard. A long garland encircles the body. The figure on the sinister, with ornaments similar to those of the one on the dexter, is single-headed and carries in its lower left hand a trident, upper left a manuscript (?) and upper right a rosary, the lower right palm held against the chest being roughly in *abhaya-mudrā*.

The decoration of the back-slab is very artistically composed. Thus two luxuriantly-foliated wavy lotus-stalks, the dexter one issuing from the mouth of the *makara* on which Gaṅgā stands, encircle her. The dexter stalk, with flowers, buds and hoots within wavy folds, ends at the crown in a lotus which acts as an umbrella over her head.

30. OTHER SITES

Other sites visited are : Nigali-sagar (District Taulihawa; lat. $27^{\circ} 35' 40''$ N.; long. $83^{\circ} 6'$ E.), 7 km. north-east of Taulihawa; Sisahniya (District Taulihawa; lat. $27^{\circ} 31'$ N.; long. $83^{\circ} 13'$ E.), 7.3 km. north-west of Lumbini; Taulihawa; Paisia (District Bhairhwa; lat. $27^{\circ} 25' 10''$ N.; long. $83^{\circ} 15'$ E.), 6 km. south-west of Lumbini; Karidah (District Bhairhwa; lat. $27^{\circ} 25' 30''$ N.; long. $83^{\circ} 14' 50''$ E.), 5.6 km. south-west of Lumbini; and Sagarwa (District Bhairhwa; lat. $27^{\circ} 28'$ N.; long. $83^{\circ} 15'$ E.), 2.6 km. west of Lumbini. With regard to Nigali-sagar (pls. CLVIII and CLIX), Sisahniya and Taulihawa the author has hardly anything to add to what has been written by P. C. Mukherji except that the pillar-fragments lying at Nigali-sagar might have hailed from Gotihawa (p. 229). At Sagarwa are the ruins of a Śaivite temple, now in the last stage of decay. No detailed notes were drawn about the mounds of Paisia and Karidah, visited rather casually towards evening. They appear to contain ruins of brick temples dedicated to Brahmanical deities, mutilated images of whom are found on the tops of the mounds.

APPENDIX

POTTERY-MAKING AT LAUSADIYA¹

LOCALITY

Lausadiya is a tiny hamlet, half a kilometre to the south-south-east of Tilaura-kot. It is so called by the local potters because of a large heap of iron pieces near the locality, but does not find mention in the one-inch-to-a-mile map-sheet of the Survey of India. There are only two families of the potters living in thatched huts (pl. CLX A) in this hamlet. The method followed by the potters in the making of pitchers (*gāgrī* or *ghadā*) is as follows.

WHEEL

In a corner of a thatched shed (pl. CLX B) there is a circular shallow pit, 7.5 cm. deep, on which is placed a solid clay wheel (*chāk*), 96.5 cm. in diameter. In the centre of the solid wheel (pl. CLXI A) a terracotta disc (*māth*), 30.5 cm. in diameter, is secured by clay. The pots are prepared on this disc. A small stone slab (*pathre*) is fixed with clay in the middle of the underside of the wheel. In the centre of this *pathre* is a small conical socket. When the wheel is in motion, this socket rests on a short conical wooden pivot (*khunṭā*), the latter being half-buried in the ground in the centre of the pit. On the upper surface of the wheel is another small socket, 2.5 cm. in diameter. The wheel is revolved by a stick, about 91.5 cm. long, inserted into the socket.

PREPARATION OF POTS

Pots are manufactured out of the locally-available sticky clay, without anything mixed in it. As elsewhere, the first stage of the pitchers is prepared on the wheel itself. The rim is fashioned by hand, and the base of the pot is cut out of the wheel by a thread.

The pot is allowed to dry to a certain extent inside the work-shed itself. On hot days pots taken out of the wheel at about four o'clock in the afternoon are beaten to shape next morning. The way of beating is the same as elsewhere. The flat-based pot

¹ Already published in the *Bulletin of the Anthropological Survey of India*, XI, no. 1 (1962), pp. 13-14.

is placed on a shallow basin (*pārī*), and its body is enlarged into a bulbous one by beating it externally by the right hand with a wooden beater (*piṭan*), which is in the form of a disc with a handle (pl. CLX B), a terracotta dabber (*piṇḍī*) with a neck being held internally at the corresponding spot by the left hand. Immediately before the beating, ash is sprinkled inside the pot and also on the external lower part of the pot, so that the dabber and the basin do not stick to the body of the pot. After the pitcher has been enlarged to the required size and shape and the corrugations smoothened, its lower part is given a slightly conical shape by beating with the help of another dabber (*gāhnī*), which has a thick stick attached to a socket, about 2.5 cm. deep and 1.2 cm. in diameter, at its top. Holding this stick, the potter internally beats the bottom of the pitcher. Before this beating, the pitcher is placed on a large deep basin (*ātharī*) with a sprinkling of sand. Finishing touches are given again by the beater and the first dabber. Thereafter, the shoulder of the pot is polished with the twig of a bamboo and cleaned with a moist cloth.

DECORATION

Decorations are generally incised with finger-nails on the junction of the body and the shoulder of the pitcher and on the shoulder itself. Usually the decoration is completed only with incisions made by two nails on the pot rotated on the basin on which it is placed. Sometimes, a clay roulette and even a comb are used for incising decorations.

SLIP

When the pot has been dried for a day (in summer), the slip is applied on its upper part by means of a piece of cloth (*potārī*). The slip is made very thin; it is prepared of three parts of yellowish ochrous clay (*kābis*), available in the foot-hills, one part of powdered bark (dried) of a mango-tree (*ām-kā-chhālī*) and a small quantity of *sora*, all mixed together in water.

FIRING

When a large number of pots, prepared in the above way, accumulate, they are consigned to fire at dusk. The kiln is an open-air pit (*āwā*) (pl. CLXIB), nearly 65 cm. deep, in which is first spread dried cow-dung (*kaṇḍā*). The jars are placed on this bed of cow-dung in a circle, leaving the centre free. Over and against the larger jars are placed smaller pots, while fragments of the burnt vessels are inserted below the bottoms of the pitchers and pots of the lowest layer immediately above the cow-dung. In the vacant central part of the pit is then deposited a vessel (*nārī*) with a large opening in its bottom. Other vessels are now heaped up (pl. CLXII) and a baked jar (*gāgrī*) is kept on the *nārī*.

More cow-dung is spread over and around the heap of pots (pl. CLXIII A). The whole system is then covered with straw (pl. CLXIII B), over which is applied a thin clay-coat (pl. CLXIV A). On a basin a cow-dung cake is then lit and the burning cake is placed in the central shaft (pl. CLXIV B) through the interior *nārī* after removing the *gāgrī*. The *gāgrī* is then placed in its earlier position and all its sides are sealed off with ashes. Smoke escapes gradually through the coated straw. The pots inside thus are baked for a whole night. In the morning the pit is cleared and the pots, turned red, are removed.

POTS OF BLACK WARE

In the bazar of Taulihawa black pots are also sold. According to the potters of Lausadiya, they are manufactured in the above way, with the following differences.

Before they are baked such pots are besmeared with oil; the method of baking is the same except that when the cow-dung cakes start burning well, the top-piece, i.e. the *gāgrī*, is removed, the *nārī* is filled with husk and the *gāgrī* re-placed. Further, the coated straw is covered with ashes, so that smoke may not come out.

The caste of this class of potters is different from that of the potters of Lausadiya who make only pots of the red ware.

INDEX*

A

- abhaṅga*, 203
abhaya-mulā, 201, 249
abhisheka, of Lakshmi, 101, 231
Achirāvati, r., 11n.
Achyu, 85
 agate, bangle, 143, 144; bead(s), 123, 124-25, 133, 135, 137, 139, 220; disc, 122
Agimitrāsa, 91, 99
Agri, 237, 239; -*kona*, 237, 239
Agrawal, D. P., 159n.
Ahichchhatra, 79, 85, 106, 119, 174, 175, 178, 195, 211
Ahirauli, 6
 akimbo, 104, 106, 209, 216
ākṛiti, 247n.
Alamgirpur, 119
 'Alau'd-Din Khalji, coin of, 196, 205
Allan, J., 87, 89, 91, 215
Almandite, 128
Amahwa, 205
āmalaka, 129, 221
Amauli, 6
 amethyst, beads of, 123, 128, 137, 139; drilled leaves of, 123, 128n.
Amitābha, 200
am-kā-ehhālī, 251
Ancient India, 16n., 17n., 106n., 121n., 128n., 175n., 184n., 186n., 206n., 207n., 211n., 213n., 214n., 216n.
 animal, figurines from Tilaura-kot, 108-16; remains from Tilaura-kot and Kodan, 184-92
Animal Remains from Harappa, 184n.
aṅkuṣa, 88, 237, 239
Annual Progress Report, Archaeological Survey of India, North-Western Provinces and Oudh Circle, 5n., 6n., 231n., 233n., 243n.
antarvāsaka, 202
 antimony rod(s), 122, 144, 147, 153, 154
 antler, 187

- Aparājita-pricchā*, 233n., 235, 237, 239n., 243
Araura-kot, 7, 193, 225-26
A Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal, 6n., 7
arghyapatta, monolithic, 171, 230
arhaḍ plants, 205
Arikamedu, 207, 211
 arrow-head(s), bone, 153-54; iron, 147, 150, 152
 arrow-well, of Hiuen Tsang, 7
Artiodactyla, 186
aśoka, tree, 161, 200
Asoka, 5, 193, 198, 208, 228n.; pillar of, at Gotihawa, 6, 157, 208, 228-29, at Lumbini, 197; *stūpa* of, 229
Asokan Brāhmi, 17
astragalus, 188, 189, 191
āthl, 251
 aventurine bead, 123, 128
āwā, 251
Ayodhya, 91, coin-type of, from Lamtiya, 215
āyudhas, 229, 237, 239, 247

B

- Babaji*, 156
Babhi (see *Bamhni*)
Baidauli, 6
 Bairat, Asokan pillar at, 5
 ball(s), of stone, 121, 122; of terracotta, 117, 118, 120
Balrampur, 5
Bamhni, 79, 81, 213, 215, 217-18, 220
Banarasia, 79
Banganga, r., 9, 193, 248
 bangle(s), 141-43, 145, 147
Bankatwa, 221
bārasīṅgā, 188
 barrel-shaped handle, 47
 basin(s), 43, 45
Basti, District, 5, 7, 9, 79

*Prepared by Shri B. M. Pande, Deputy Superintending Archaeologist, Archaeological Survey of India, New Delhi. The author is highly thankful to him for undertaking this work readily.

EXCAVATIONS AND EXPLORATIONS IN THE NEPALESE TARAI

- beaded, garland, 171; girdle, 164
Beads from Taxila, 125n., 127n., 128n.
 Beal, Samuel, 195n.
 Beck, H. C., 123n., 125n.
 Bel, r., 219
 bell-shaped pendant, 112
 Bengal, 25n.; metal feeding-vessel of, 39n.
 Beti, 193
bhadrasana, 200
 Bhagwanpur, Asokan pillar at, 5
 Bhairava Buksh, 7, 231, 233n., 235n., 243n.
 Bhairhwa, 8, 193, 196, 249
 Bharhut, 106
 Bhir Mound (Taxila), 106, 120n., 121, 128, 128n.
 Bhutaria (Bhitria), 219
bhoga, 174
 Bholu Nath, 184, 186n.
bhūmi-dmalukas, 168
bhūmi-sparśa-mudrā, 199, 200
 Bijua, 79, 193, 215, 225
 Bikuli, 6, 161, 167n., 193, 196, 222-23
 Bilal, r., 9
 bird, terracotta figurine of, 112, 115, 116
 black-and-grey ware, 25, 29, 30
 black-and-red ware, 18, 20-21, 206
 blackish grey slip, 29
 blackish-grey ware, 17, 27, 33, 34, 227
 black(ish) slip, 27, 29, 33, 35, 38, 67, 69, 77, 81, 109, 120
 black-slipped ware, 12, 21
 Bodhisattva, bronze figure of, 203; stone image of, 200
 bone, bangle(s), 142, 143; bead(s), 123, 129, 135
 Bose, Nirmal Kumar, 235n.
Bos indicus Linn., 184, 185, 188-89, 190, 192
 bottle-necked vase, 78, 215
Bovidae, 188
 bowl(s), 18, 19, 20, 21, 38, 79; bronze, 147
 bowl-cum-lid, 206, 225
 bracelet, glass, 143
 Brahmanical deities, 78, 204, 249; images, 81; religion, 196; temple, 221
 Brahmanism, 204
 Brāhmī letter(s), 17, 18, 63, 72, 90, 99, 100
 braziers, 22
 brick-bats, 164, 165, 169, 171, 220; grits, packing of, 165, 171
 bronze, bowl, 147; ring, 145; vase, 147
 brownish-white chalcedony, 124
Bubalus bubalis Linn., 184, 185, 190
 Buddha, 8, 84n., 157, 198, 200, 202; head of, 199, 201; image of, 221
 Buddha Jayanti celebrations, 228
 Buddhism, 196
 Buddhist, 7, 78, 84, 203, 204; monastery, 156; monk, 197; *stūpas*, 233
Buddhist Records of the Western World, 195n.
 buffalo, Indian domestic, 185, 190
 Bulandi Bagh, 102
 bull, symbol on coin, 89, 90, 95, 97; terracotta figurine(s) of, 109, 114
Bulletin of the Anthropological Survey of India, 250n.
 bun-shaped coiffure, 9
 Burhi Rapti, r., 9
 Butwal, 221
- ## C
- cabochon-cuts*, 123
 caduceus, 87
 calcaneum, 188, 190
 canidae, 186
Canons of Orissan Architecture, 235n.
Canis familiaris Linn., 184, 185, 186, 191
Capra hircus aegagrus Erxl., 184, 185, 190, 192
Caprinae, 190
 carbon dioxide, 182
 carinated dish(es), 30; *hāṇḍī(s)*, 19, 20
 carnelian beads, 123, 124, 127, 133, 135, 205, 220
 Carnivora, 186
 carved bricks, 15, 161, 173, 204, 220, 232, 234-47
 casket, -lid, 117, 121; of red ware, 39; of crystal, 47; of steatite, from Piprahwa *stūpa*, 41; toilet-, 118, 122
 cemented eye bead, 126
 cervical vertebra, 188
Cervidae, 187
Cervus duvauceli Cuv., 184, 188
Cervus unicolor Kerr., 184, 188, 191
 Chaganth, 79, 161, 193, 196, 215, 223-24
chaitya-windows, 204
chāk, 250
 chalcedony, bangle(s) of, 142; beads of, 124, 127, 133, 135, 137, 220; polished piece of, 121, 123
 chamfered cylinder octagonal bead, 126
 Chamundā, image of, 161n., 219, 220; temple of, 220
champakā flower, 230
 Changhat, 223
 Chatradi, 161, 193, 196, 243

- Chauttariya Captain Bir Jang of Butual-Tansen, 6
 cheek straps, 110, 111
 Chelonia, 185
 chisel, iron, 147, 148, 150, 152
 Chitradei (see Chatradi)
 Chitrā-devi, 248
 Chunar sandstone, 197
 Churia range, 9
 citrine bead, 128, 137
 coins, cast, 88-90; circular cast, 86-87; circular struck, 86; from Lumbini, 203; from Tilaura-kot, 84-99; of copper, with four-spoked wheel, 85, 91-93; oblong or square struck, 85-86, 91-93; punch-marked, 87-88; unincised cast, 88-90
 collared beads, oblate circular, 132; rows of, 119
 conical stopper, 119
 cooking-hāṇḍī(s), 81, 174, 177, 178, 218, 219, 221, 222, 224, 225, 226, 227; -pan(s), 207, 209; -pot, 79
 conflagration, at Tilaura-kot, evidence of, 14
 Coomuraswamy, 101
 copper, antimony rod, 147; bangle, 147; bead, 137; coin(s), 84-99, 203, 207, 209, 220; fish-hook, 147; ring, 145, 147; vase, 237; wire, 128n.
 cow-dung cakes, 229
 crescent-shaped notches, 22
 criss-cross diamonds, 119
 crystal, bead(s), 126-27, 136, 139; easket, of Piprahwa, 47; pendant(s), 126, 135
 cuneiform, 189
 cylinder(s), 82, 117; circular bead(s), 126
 cylindrical muller, fragment of, 122
 decorated bricks, at Bikuli, 223; Chatradi, 248; Kodan, 159, 161, 173; Lamiya, 215; Lumbini, 204; Sagrahawa, 232-47; Saina-Maina, 221; Sonagarh, 220
 deep, bowl(s), 19, 21, 31, 34, 38, 39, 206; -red slip, 33, 104
 Delhi-Topra, Asokan pillar at, 228
 demon, 164
 Deva Daba, 8
 Deva-hrada, 8
 devasa, 91
 Devī-sthān, 223
 dharma-chakra-pravartana-mudrā, 200
 dharaṇī, 235
 dhōṭī, 200, 203, 209, 229, 249
 dhraja, 237, 239
 Dhyāni-Buddha, 201
 diamond-shaped flower, 170; pendants, 163
 die-struck coins, 85, 86, 93-94
 dīkṣā, 237, 239
 Dikshit, M. G., 124n.
 Dipārnava, 237, 243, 247n.
 disc(s), fragment of, 117, 121, 122, 227; of grey ware, 20, 30n.; small tablet-like, 120
 dish(es), 22, 23, 25-30
 dog, 84n., 185, 186
 Dohri, 79, 195, 215, 226, 229, 231; -Mahadeva, 193
 door-jamb, 221; -ring, 152
 double-edged sword, 127; -petalled lotus, 203
 dull-red slip, 27; -red ware, 31, 33, 69, 71, 72, 180

D

- dabber(s), 17, 119, 251
 dagger-shaped pendant, 132, 135
 dakṣiṇāvarta, curls, 201; spiral, 48
 Daldaiha, 79, 215, 226-27
 damaru, 212, 220
 daṇḍa, of Yama, 237, 247
 Daṇḍi, 230
 Dano, r., 193, 207, 226
 danta-lagna, 220
 dark-chocolate slip, 69, 106
 dark-grey slip, 25, 27, 29, 30, 33, 37
 darkish-brown slip, 34; -grey slip, 69; -red slip, 66, 102, 105, 107
 débris, 159, 164, 171, 177, 181; shroud of, 157

E

- ear-studs, 117, 119, 204
 eight-petalled flower, 144; -spoked symbols, 109, 111, 114, 115
 elephant(s), 84n., 89, 90, 95, 98, 99, 106; terracotta figurine(s) of, 109, 112-14
 ellipsoidal bead, 124, 125; plaque, 115
 elongated, S, 90, 98; taurine, 144; tree within railing, 97; wedge-shaped notches, 22
 Emydiidae, 185
 epiplastron, 185, 191
 etched bead(s), 123, 124-25
 Etched Beads in India, 124n.
 eye beads, 123; plano-convex blocks for, 123, 126

F

- Fa-hien, 5, 84n., 156, 195, 196, 208
 feeding bowl(s), 39
 female figurine(s), 101-05, 217
 fine grey ware, 33, 35, 37
 finger-ring, 144
 finial, 117
 fish-hook, 145
 five-petalled flower, 220
 flanged bracelet, 143
 flesh-rubber(s), 117, 119
 flower-shaped stopper, 119
 forelimb-bone, 186
 fortification-bands, 125; -wall, 12
 four-spoked symbol, 109; wheel(s), 17, 85, 91, 92, 93, 94, 110; wheel, stamped on pottery, 17
 frying-pan, 56, 57, 221
 Führer, A., 5, 6, 7, 156, 222, 231n., 233, 235, 243n.
Further Excavations at Mohenjo-daro, 85n.

G

- ga, Asokan Brāhmi letter, 17
 gaddi, 237, 239, 247
 Gadre, N. D., 233n.
 gāgrī, 250, 251, 252
 gāhni, 251
 Gapeśa, 201, 221
 Gaṅgā, 230; image of, 248, 249
 Gangetic plain(s), 185, 193, 195
 Ganwari, 79, 195
 gargoyle, piece of, 170; makara-shaped, 222
 garnet bead(s), 123, 128, 135, 137
 garnetiferous micaceous gneiss, 128
 gateways of Sāñchlī, 105
 Gautama Buddha, 157, 193, 198
 ghaḍā, 250
 ghaṭa(s), miniature, 17, 23, 25, 53, 55, 206, 228
 Ghaghra (Ghaghara or Gogra), r., 9
 glass bead(s), 123, 124, 129-31, 133, 135, 137, 139; bracelet, 143
 glazed sherd(s), 196
 gneiss bead, 128, 137
 goat, Indian domestic, 84n., 185, 190-91, 192
 Gobari, 5
 Gogra, r., 9
 Gonda, District, 9
 Gorakhpur, District, 9

- Gorakhpuri sikkā, 84
 Gothis, 157
 Gotihva, 156
 Gotihawa, 5, 157, 193, 208, 228-29; pillar at, 228
 graffiti, from Tilaura-kot, 17, 33, 63
 green jasper bead, 139
 grey ware, 12, 17, 21, 23, 25, 27, 29, 30, 31, 34, 37, 38, 67, 69, 78, 216; slip, 27, 29, 35, 37; from Lamriya, 214
 Guha, B.S., 184n.
 Gulmi, 224
 Gupta period, 78, 195, 202; style, 202; tradition, 201

H

- hāndī(s), 19, 20, 25, 57, 59, 81, 222
 hand-made pottery, 16; -modelled figurine, 100-01, 108; torso, 102
 haṁsa, 231
 hāra, 200, 201, 202, 203, 248, 249
 Harappa, 184, 185, 186, 187, 188, 189, 190, 191
 Hardewa, 215, 219
 Harnampur, 6
 hastigarta, 157
 Hastināpura, 15, 16, 23, 25, 27, 30, 37, 43, 47, 48, 61, 63, 65, 67, 69, 71, 73, 75, 78, 79, 81, 119, 121, 184, 185, 186, 187, 188, 190, 204, 207, 208, 211, 216, 217, 220
 hexagonal beads, 123, 127
 Himalayas, the, 161, 193
 Hsien Tsang, 5, 7, 84n., 156, 157, 161, 193, 195, 196, 197, 198, 208
 hollow figurine, 215
 horse(s), 84n.; terracotta figurine(s) of, 110-11, 114-15, 116
 humped cattle, 84n., 184, 188-90; terracotta figurine(s) of, 109-10, 114
 husk, used in bricks, 13, 84
 Huvishka, 209; copper coin of, from Kadzahawa, 212, from Sisaula, 216

I

- India, 79, 100, 184, 189, 193, 195, 196
Indian Archaeology 1361-62—A Review, 199n.
 Indo-Nepalese border, 9, 193
 Indo-Parthian period, 121
 inscribed potsherds, 99-100

Isāna, 237, 247; -*koṇa*, 237, 239
ishṭikā-nyāsa, 239, 243

J

Jagdishpūr, 6
 Jain, Bhagwandas, 233n., 239n.
 Janwar, 193
 Janārdana, 247n.
 jar(s), 63, 65
 jasper bead(s), 123, 128, 139
 Jaskaran Singh, Major, 5
 Jhandainagar, 249
 Jung Bahadur Rana, Kaiser Shum Sher, 197
*Journal of the Royal Asiatic Society of Great Britain
 and Ireland*, 7n.

K

ka, Aśoka Brāhmī letter, 17
kachchhā, 203, 229
Kachchi-kuṭi, 202
Kachuga tectum Gray, 184, 185
kaḍhā chāpānā, 197
kaḍhāl, 23
 Kadzahawa, 79, 81, 195, 202, 210-14, 215, 217;
 bricks at, 211; pottery from, 211-12; copper coins
 from, 212; terracotta figurines from, 212-13
 Kailā, r., 9n.
kalaśa, 221
 Kanakamuni, 193; *śrūpa* of, 5, 7, 208
kaṇḍā, 251
kani, 168
 Kanishka, copper coin of, at Kadzahawa, 212, at
 Sisania, 216
kankar-nodules, 12, 159, 164, 165, 166, 172, 173, 252
 Kapila, 9n.
 Kapilavastu, 5, 7, 84n., 156, 157, 193, 195
 Karidah, 249
 Kārttikeya, 164, 171
 Kathmandu, 128n.
 Kauśāmbi, 90; Lanky Bull type of coins from, 85
khaḍga, 237, 239, 247
 Khajji dynasty, 206
 Khunian, 9, 193

khurā, 163, 165, 166, 167, 168, 169; -shaped bracket,
 166
kliti-mukha, 170
 knob-head, 150
 Kodan, 5, 12, 15, 79, 82, 83, 193, 196, 204, 207, 208,
 209, 215, 216, 218, 219, 220, 221, 222, 223, 224,
 225, 226, 227, 235; animal remains from, 184-92;
 excavation at, 156-83; temples at, 164-74, 220, 233
 Koilahawa, r., 9n., 193
 Kolhuwa, 5
 Kosala, Viśvādabha, king of, 6
koṭ, 9, 211, 215, 217, 219, 224, 225, 227n.
 Kothi, 193, 227
 Krakuchchanda, 5, 156, 208; *śrūpa* of, 7
 Krishnanagar, 248
Kshirāṇava, 237, 239n., 243n.
 Kubera, 237, 247
 Kudan or Lohri-Kudan, 158n.
 Kulūta, coins of, 85
kumbha(s), 233, 243
 Kumrahar, pillar of, 228
kuṇḍala(s), 164, 203, 248
kūrma, 243, 247; -*śilā*, 235, 237, 247n.
 Kushan(s), 78, 195; coins, 195, 203, 209, 211, 212;
 period, 199, 203
 Kusumgar, S., 159n.

L

ladḍukas, 201
 Lahari Kudan, 157
 Lakshmi, 101, 231; illustration of, 107
 Lal, B. B., 17, 18; Dr. B. B., 182
lalāṭa-bimba, 221
lallāsana, 172, 200, 219
 Lamtiya, 79, 81, 161, 195, 214-15
 Lanky Bull type of coins, 85, 90, 97
 lapidary, stock-in-trade of, 121
 lathe-turned plate, 121
 Lausadiya, pottery-making at, 250-52
 leaf-shaped spear-head, 150
 leech-shaped elliptical bead, 126
 lenticular cast piece, 144
 lid(s), 25, 47, 48, 49, 51, 52, 79; -*cum*-bowl, 177
 light chariot, two-wheeled, 117
 limb-bones, 186, 189
 lime, 182
liṅga, 158, 171, 230
 lintel, 221

tipped bowl, 39
Eisenys punctata Bonnaterra, 184, 185, 191
 Lohora-Laguda, 157
 Lokeshvara, 200
 Lori Abūt, 156
 Lori-ki-Kudān, Lori-Kudān, 156
 lotus-marked bricks, 237; -marked stones, 235; -petals, 204
 lug-collared circular bead, 132; cornerless cubes, 128
 Lumbini, 7, 9, 79, 81, 161, 193, 195, 196-205, 227, 228, 229, 230, 249; Dharmodaya Committee, 197, 199; goddess of, 198; lustrous ware from, 195

M

Mackay, E. J. H., 85n.
 Madahwa, 219
 magnesia, 182
 Mahādeva, 211, 230
 Mahāmāyā, 8
 Mahānāman, 6
maihārājatilā, 201, 203
 Mahāprajāpati, 198
 Mahishāsūramardini, image of, 159; head of, 164
 Maitreya, 200
makara, 170, 171, 207, 230, 231, 248, 249; -shaped gargoyle, 222
 malleolus, 189
 Mammalia, 186
 Mānāka, 195, 216
 Mañjuśrī, 200, 203
 Mankad, P. A., 233n.
 Mānushi-Buddha(s), 104n., 106n., 120n., 121, 184n., 228n.
 Marthi, 193
 Maski, 186, 190
māth, 250
 Mathura, 101; atelier of, 199
mātulūga, 171
 Maurya(n), 100, 101, 102, 195, 206; hall at Kumrahar, 228; polish, 197
maura of Tilaura, 9; of Nipania, 205
 Māyādevī, 196, 198; temple of, 161
 metatarsal, 188, 192
 miniature *ghaṭas*, 23, 25
 moat, 12
 Mohenjo-daro, 85n., 184, 185, 188, 190
Mohenjo-daro and the Indus Civilization, 184n.

molar tooth, 186, 190, 191
 monasteries, 156, 198, 199
 mould, terracotta, 119
mudrā, 200
 mud rampart, 12, 16
Muhammad Shāh, legend on coin, 207
muhānti, 163, 167
 Mukherji, P. C., 5n., 6, 7, 15, 41n., 47n., 156, 157, 215, 221, 222, 225, 229, 230, 231, 233, 235, 243n., 248, 249
mukuta, 203
 muller(s), 121; -shaped object, 119
Muntiacus muntjak Zimm., 184, 187, 192
Muriāe, 191
 Museum of Fine Arts, Boston, 101
 Muslim(s), 196; period, 227, 228

N

na, inscribed on potsherd, 100
nāga, 112, 199, 230, 233, 243, 247
 Nāga coins of Padmāvatī, 85
nāgakeśara flower, 200
 Nāgari legend, on coin, 207
 Nageshwara Mahadeo, 157
 Nāgrāvali, 6
 nail-headed rim, 180, 182
 Nālandā, 201
nārī, 251, 252
 Naviculo-cuboid bone, 189
 N. B. P. Ware (see Northern Black Polished Ware)
 necklace, 201
 neckless vase(s), 217
 Nepalese, Dano river, 205; tarai, 21
 Nepal Government, 233n.
ni, inscribed on potsherd, 100
nidhi-kumbhas, 233, 239, 243n.
 Nigali-sagar, 5, 7, 193, 229, 249
 Nipania, 79, 81, 205-8, 226
 Nirriti, 237, 247
 Nirvāṇa stūpa, *nirvāṇa-stūpa*, 5, 156
noli, 170
 Northern Black Polished Ware, 193, 195; from Lumbini, 204; from Nipania, 205, 206; from Tilaura-kot, 12, 15, 18-20, 23n., 37, 119
 Nowgarh, 196

O

- oblate circular bead, 132
 oblong plaque, 201
 oblong or square struck coins, 85-86, 91-93
 octagonal, plinth, 170; temple, 158
Om Manipadme hum, 221
 onyx bead(s), 125, 135
 opaque shellac-red glass bead(s), 129, 130
 Oriya manuscript, 235
 ornamental, bricks, 170, 204, 215, 223
 ornate, carpet, 111; lotus-petals, 163; *triratha*-projections, 166; vase, 158
 oval-shaped notches, 22; plaque, 108; vessel, 78
Ovis aries dolichura Duerst, 184, 185, 191

P

- pa*, Brāhmi letter, 18, 63
 Padmapāni, 203
 Padmāvatī, Nāga coins of, 85
 Painted Grey Ware, 23n.
 Paisia, 249
 Pāla art tradition, 248
 Pañchāla coin(s), 15, 91, 99
pañcharatha, 172, 230
pañcha-ratnas, 243
 Panjeki Sisania, 7
paraśu, 105, 237
pāri, 251
 Parora, 196, 227-28
pārīva-devatās, 164
paryānikāsana, 198
 Parraha, 210
pāśa, of Varuṇa, 237, 239
 paste, bangles, 173; bead, 123, 137
 Patharkot, 79, 193, 215, 224
pathre, 250
 Patkabhawa, 79, 215, 224-25
 Patna, 193, 206, 248-49
 peculiar oval-shaped vessel, 78
 Peppé, W. C., 7
 perforated sherds, from Tilaura-kot, 22; vessel, 78
 phalanges, 189
 phalanx, 187, 188, 189
 phallic *linga*, 157
 pig, Indian domestic, 185, 186-87, 191
plnd, 251
 Pīṅgala, 229

Pioneer, The, 8, 157n.

- Piprahwa, 79, 128n., 129, 144, 193, 195, 209, 212, 215, 224, 226; crystal casket of, 47; ceramic industry of, 223, 226; pottery from, 207, 216, 217, 218, 219, 225, 226, 227; steatite relic-casket from the *śrīpa* of, 41
 Pipri, 79, 81, 157, 195, 208-10, 224
pitān, 251
 plant motif, 163
 plaque(s), terracotta, 104-08, 201, 215, 217
 plastron, fragment of, 185
 plate, fragment of, 122
potāri, 251
Prāsāda-māṇḍana, 237, 239
 Prashad, B., 184n.
 pre-Aśokan characters, 233
 premolar, 188, 190
 Prince Khadga Sumsher Jung Bahadur Rana, 157
Progress Report, Archaeological Survey of India, N. W. P. and Oudh Circle, 1893-94, 5; 1897-98, 6, 231n.
 punched taurine symbol, 110
 punch-marked coins, 85, 86, 87-88, 95-96
Punch-marked Coins from Taxila, 85n., 88n.
pūrṇa-ghaṭas, 165
 pyramids, 163

Q

- querns, 120

R

- radius, left, 190
 Rāhula, 157
 Rajghat, 119, 206
 Rajgir, 206
 ram, in a toy-cart, 117; terracotta, 111, 116
 Rāmapura, 6
 Rāmghāt, 6, 193
 rampart, 11, 12, 14
 ramus, 192
 Rangpur, 184, 186, 188, 190
 Rapti, r., 9
 rat, 191
ratha(s), 170; -projections, 167

- ratia*, 87, 88
Ratnasambhava, 201
ratanyāsa, 233
Rattus rattus Linn., 184, 191
 red slip, 20, 27, 31, 65, 67, 69, 71, 72, 73, 75, 77, 78, 81, 112, 113, 114, 115, 118, 119, 120, 174, 177, 178, 180, 181, 182, 209, 215, 218; ware, 17, 21-22, 29, 31, 34, 37, 38, 65, 66, 67, 71, 72, 73, 75, 77, 78, 207, 209, 219, 222, 223, 224, 225, 227; industry, 81, 174
 relic-caskets, 239; from Piprahwa *stūpa*, 41, 47; -chambers, so-called, 233
Reptilia, 185
 rib(s), 188, 190
 right, calcaneum, 188; femur, 188; pelvis, 188; tibia, 188
 ring-well, at Kadzahwa, 211; at Tilaura-kot, 13-14
 ritual *ghaṭas*, 23
 rock-crystal bead(s), 123, 126, 135, 137, 139
Rodentia, 191
 roof-tiles, 155
 round bar-chisel, 152
 Rowland, B., 101
 Rummindei, Aśoka pillar at, 5, 197, 199; temple of, 197; trial excavation at, 7
 Rummindevi, 198
 Rūpadevi (Rūpadevi), 198
 Rupar, 106, 119
- S
- śa*, early Brāhmi letter, 17
 saddle of terracotta, 118, 119
 saddled horse, torso of, 115
Sādhu, 219, 220
śaḍḍi, 103, 104, 106, 107, 217, 248
 Sagar, 6, 7, 222, 231
 Sagarwa, 249
 Sagrahawa, 6, 193, 226, 231-47; structures of, 235
 Saina-Maina, 8, 79, 161, 193, 196, 221-22
Śakra, 198
śakti (spear), 220, 237, 239
Śakyas, 6, 198, 235; massacre of, 233
Śākyamuni, 7
śāl forest, 6
Sāmāi-devī, 158, 211
Sāmāi-māi, 219, 227
Sāmāi-māyi, 9, 214
samo-pāda, 201, 229
 sambur deer, 84n., 188, 191
Sāñchi, 105, 228
 sanctuary, at Kodan, 167-168, 170-72
sañghāṭi, 202
Saṅgharāṣas, 157
saptaratha, 198
 Sarna, R. P., 159n.
 Sarnath, 228
 Sastri, K. Vasudeva, 233n.
 Satyāmītra, coin of, 195, 215
 scaraboid, 128
 scarf, 202, 203
 sculptured door, 231
 sealing, from Tilaura-kot, 99
 serpents, 243
 Sewell, R.B.S., 184n.
 Shah, Priyabala, 233n.
 shallow, bowl(s), 19, 20, 29, 30, 154; frying-pans, 23, 216, 218
 sheep, Indian domestic, 185, 191
 shell bead, 123, 129, 137
 Shohratgarh, 9
 Sihokhor, 79, 196, 215, 227
 Sijuwa, 193, 225
śikhāṇḍaka-coiffure, 104
śikkā, Gorakhpuri, from Tilaura-kot, 84
 Sikrawa, 205
Śilparatnākara, 237, 239
Śilpi-poṭhi, 235, 237
 silver, bead, 128, 135; coin(s), 84, 87-88
 single-spouted vase, 178
 Sirinagar Sāgar, 156
 Sirinagra, 79, 222, 226
 Sirkap, 121
 Sisaniya, 193, 249
 Sisaniya, 79, 81, 193, 195, 215-17, 220
 Siwa, 193
 Śiva, 156, 209, 212, 221
 Śivagarh, 6
 Śivālaya, 230
 Siwaliks, 185
 Siwalwa, 161, 193, 196, 229, 230-31
 six-armed symbol, 87, 95
 Smith, V.A., 6, 223, 235, 239
 solar symbol(s), 109, 114, 117, 119, 120
 Sompura, N.M., 237
 Sompura, P.O., 223n., 237, 239, 243, 247n.
 Sompura Śilpius, 239
 Sonagarh, 79, 161, 193, 196, 219-21
 Somawangarh, 219

sara, 251
 spear-head, 152
 spherical bead(s), 125, 126, 133
 spouted vase, of red ware, 82
 sprinkler-type of water-flask, 81
 Śrāvastī, 11n., 202
śreṣṭha-dhātu, 243
 Śrī-Dhruva, 247n.
 Śrinagar, 6
śrī sultān Alāwādīn, 207
śruva, 239
 stamp(ed) sherds, from Tilaura-kot, 17, 99; with a solar symbol, 120
 steatite toilet casket(s), 122
 stool-quern(s), 117, 118
 stopper(s), 117, 118
 strainer-like vessel, 17
śūpa(s), 6, 128n., 129, 144, 156, 157, 161, 197, 198, 199, 200, 203, 229, 231, 233; -monastery, 233, 243n.; of Kanakamuni, 5, 7; of Krakuchchanda, 7; of Mahānāman, 231; of Piprahwa, 7, 41, 128n.; -shaped clay lumps, 211, 217, 227
 sturdy vase, 81
Sulāḥ, 186
 Sukhbel, 219, 220
Sultān [u'l-A'] zam 'Alāu [d] Dunyā wa'd-Dīn, 207
 sun, symbol on coin, 87, 88
Suṅga(s), 101; affiliation, 217; artistic movement of the, 100; idiom, 101; period, 215; plaque, 215; style, 209; terracottas, 101
 Surendra Singh of Taulihawa, 203n., 220, 226
 Sūrya, image of, 229, 230
Sus cristatus Wag., 184, 185, 186, 191
svastika, 89, 90, 98, 203, 243, 247
 sword-shaped pendant, 135

T

Tata Institute of Fundamental Research, 159
 Taulihawa, 8, 9, 157, 158, 193, 203, 208, 215, 217, 218, 220, 221, 222, 223, 224, 225, 226, 227, 228, 231, 248, 249, 252
 Taulivā, 156
 taurine symbol, 87, 95, 97, 110, 114
tawā, 23
 Taxila, 88, 104, 106, 121, 125, 127n.
 terracotta, animal figurine(s), 156, 210, 217, 218, 219, 222, 224, 247; ball, 215, 224; bangle, 143;

bead(s), 131-32, 143, 139-41, 205, 210, 215; dabber(s), 204, 224; disc(s), 173, 205, 226; flesh-rubber, 205; human figurine(s), 100-08, 209, 212-14, 215, 216, 218, 225; plaque(s), 101, 104-08; roof-tiles, 155; tiles, 227; *thālī*, 23; votive tank, 215
 Thakkura, Pheru, 233n., 239n.
 Tharu village, 221, 223
 thoracic vertebra, 188
 three-arched symbol, on coin, 87, 95, 96
 Tibetan characters, 221
 tibia, 188
 Tilaura, 5; *manza* of, 9
 Tilaura-kot, 5; excavation at, 9-155
 Tilar, r., 9n., 199
 tiny, bowl, 154; plaque, 201; yellow studs, 224
 toilet-casket(s), 118, 119, 122
 torso, 102, 111, 112
torana, 170
 toy-carts and -wheels, 116-17
 tree within railing, 96, 97, 99
 trellis-pattern, 168
 triangle-headed standard, 96, 98
Trionychidae, 185
triratha, 170, 172, 197
 triskelis, 95
triśūla, 164, 211, 220, 237, 239
 troughs, 218
 two-wheeled, light chariot, 117; toy-cart, 117

U

u, letter on sealing, 99
uchcha-dhātu, 243
uchchhishṭa, 25
 Ujjain symbol, 89, 90, 98
 uninscribed cast copper coin(s), 88-90, 96-98
uparīta, 102, 201, 213
uparītā, 200, 218
 Upper Gangetic valley, 173
ūrā, 199
 Ushā or Pratyūshā, 230
ushnisha, 199, 201
 Uttar Pradesh, 9

V

vajra, 144, 147, 203, 212, 237, 239
vajraka, 239

EXCAVATIONS AND EXPLORATIONS IN THE NEPALESE TARAI

Vajrapāṇi, 203

vajra-paryāṅkāsana, 199, 200

valayas, 164

vata-mudrā, 201, 220

Varuṇa, 237

vase(s), of grey ware, 69, 77; of red ware, 69, 71, 72, 73, 77, 81, 99; -shaped terracotta bead, 205

Vāstunāra-prakarapāṭi, 233n., 239n.

Vasudeva Smṛti, K., 233n.

Vāstu-śāstra, 239

Vāyu, 237; -koṇa, 239

vidiśā, 247n.

Vidiśā coins, 85

Viṇḍabha, king of Kosala, 6

village-goddess, 227n.

Vima Kadphises, 209

Vishnu, 229, 248

Vishnudharmottara-purāṇa, 233n.

Viśvakarma-prakāśa, 235, 247

Viśvakarma-vāstuśāstra, 233n.

viśva-padma, 200

Vosi, Major W., 157

votive tank, from Lamtiya, 214

Vṛishṇa, coins of, 85

vyākhyāna-mudrā, 200

W

Waddell, L.A., 5, 7

waist-band, 203

Walsh, E. H. C., 85n., 88n.

water-flask, 78, 81

wedge-shaped, bricks, 13; -projections, 166

wheel, four-spoked, 91, 92, 93, 94; toy-, 116-17

Y

ya, Brāhmī letter, 90, 100

yakshas, 106

yakshis, 106

Yama, 237, 247

Yamunā, 231

Yasodharā, 157

ye, Brāhmī letter, 100

yi, Brāhmī letter, 99

Z

Zebu (see *Bos indicus* Linn.)

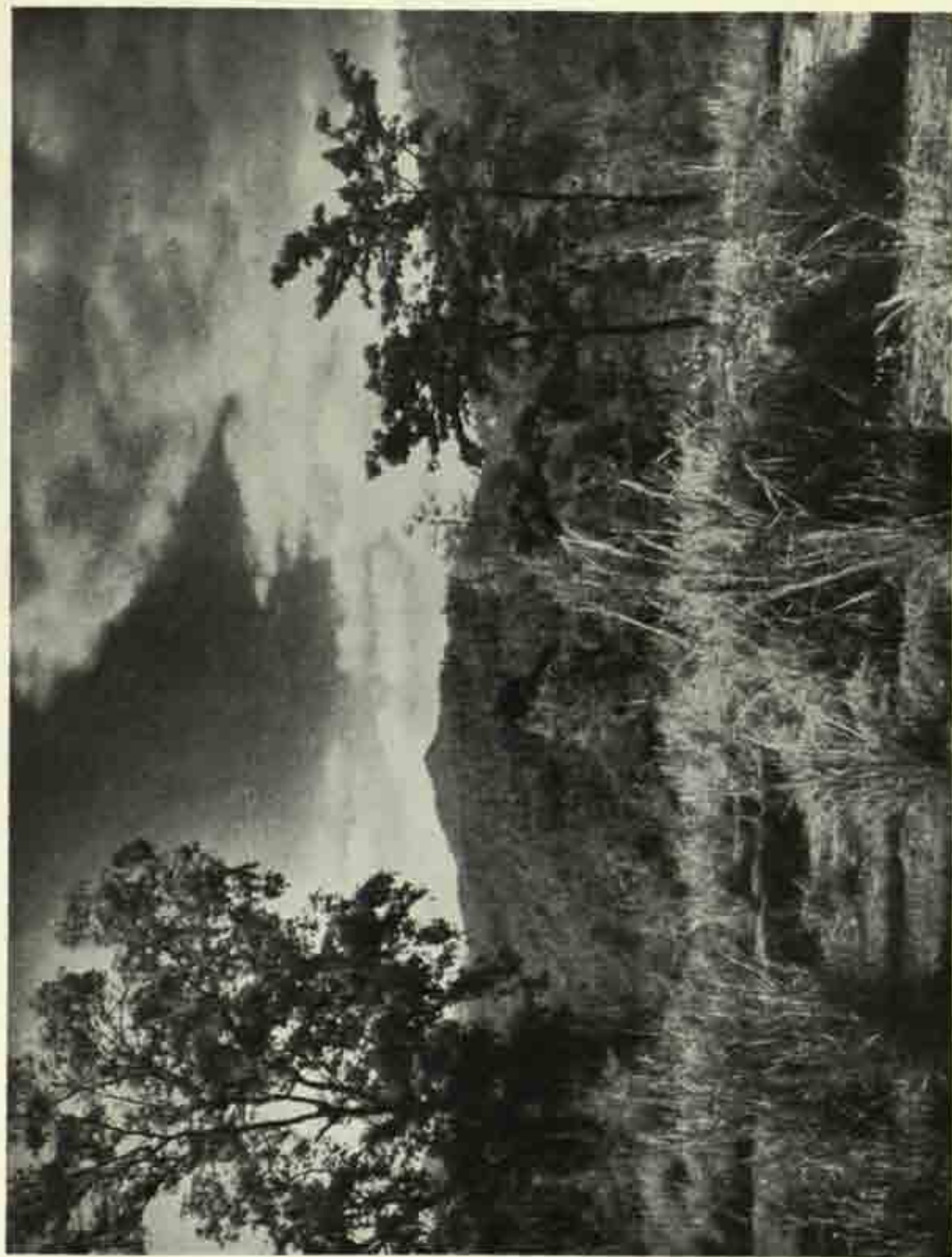
Zimmer, H., 101

zonal bands, 125

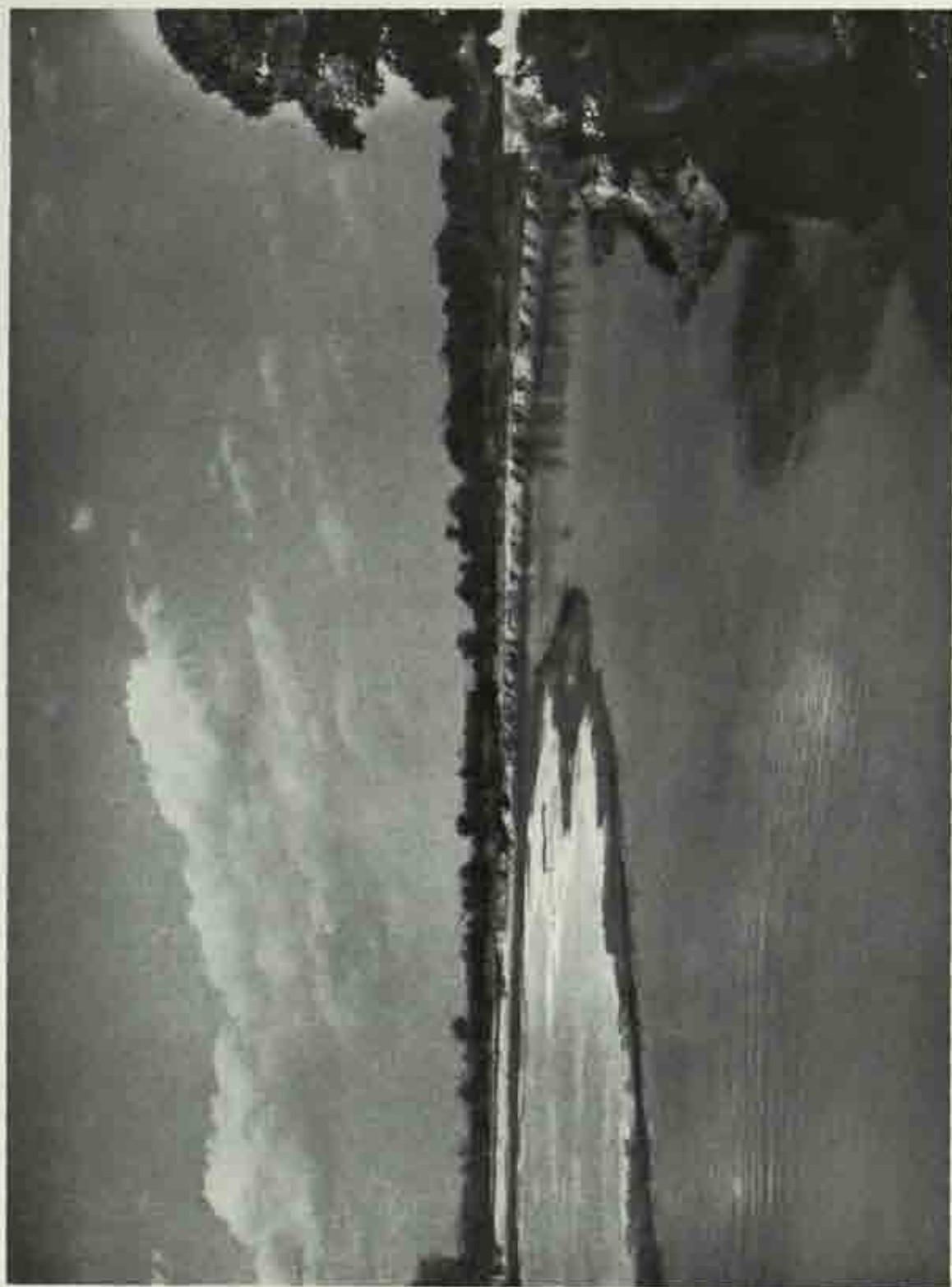
Zoological Survey of India, 185, 187, 188, 189, 190



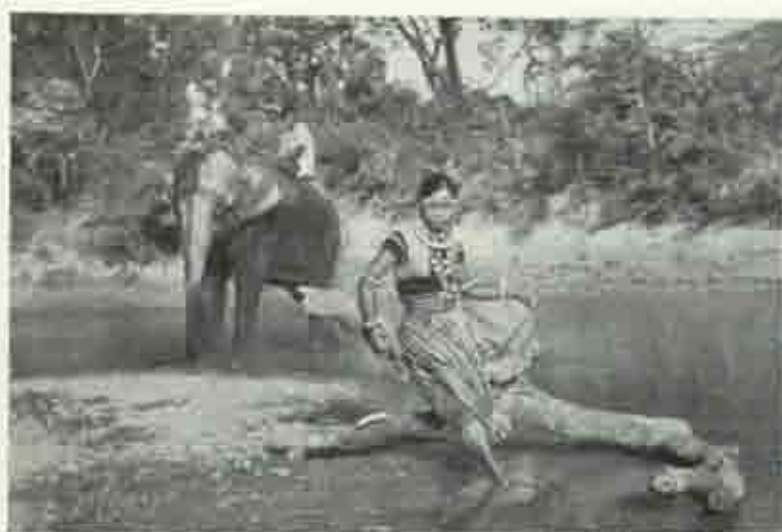
72151



Foot-hills of the Himalayas near Patharkot. See p. 9



The Banganga near Tilaura-kot. See p. 9



A. The Banganga with a Thāru girl in the foreground, See p. 9



B. A bejewelled girl of Kodan

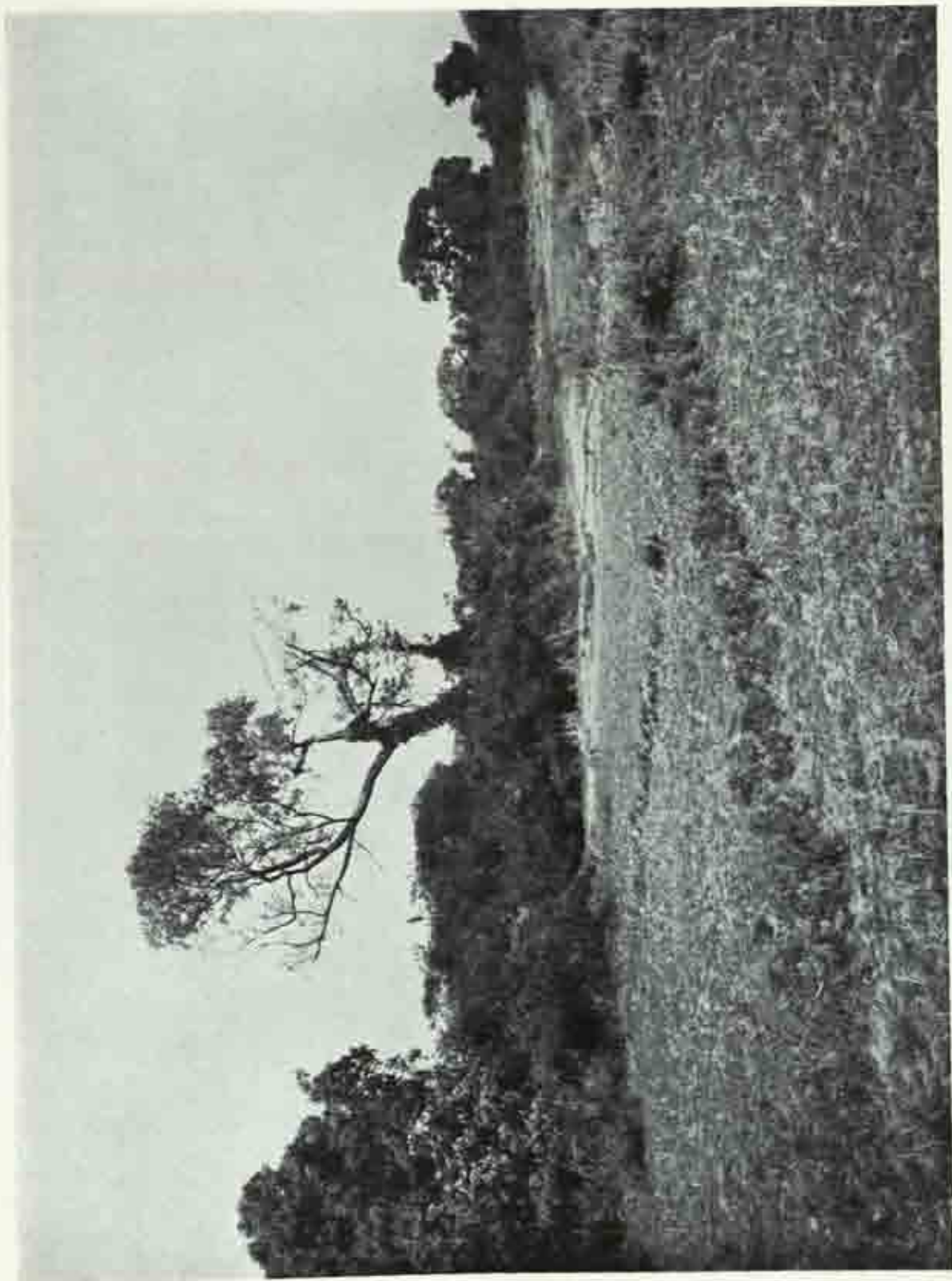
PLATE X



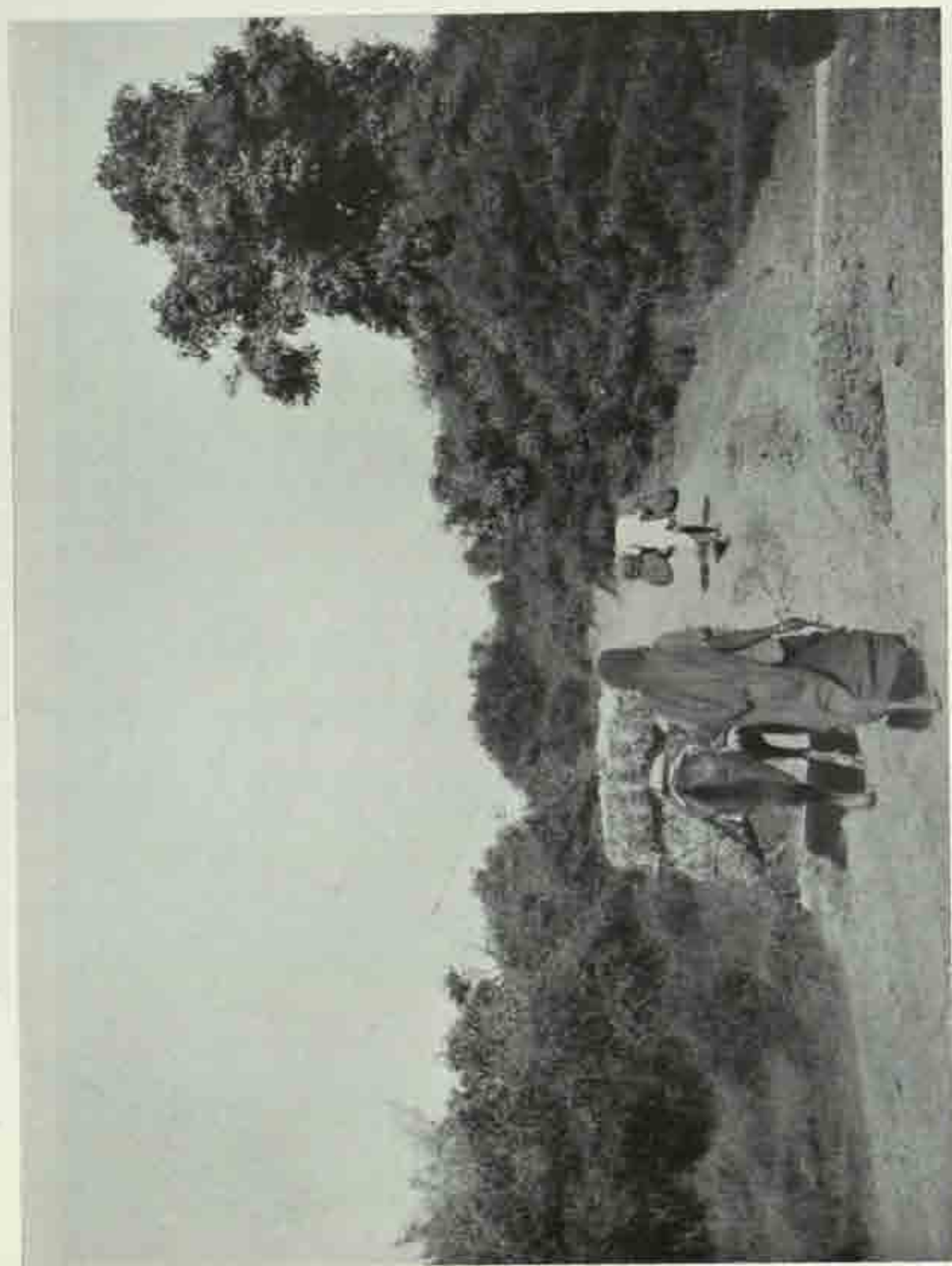
A. Tilaura: village. See p. 9



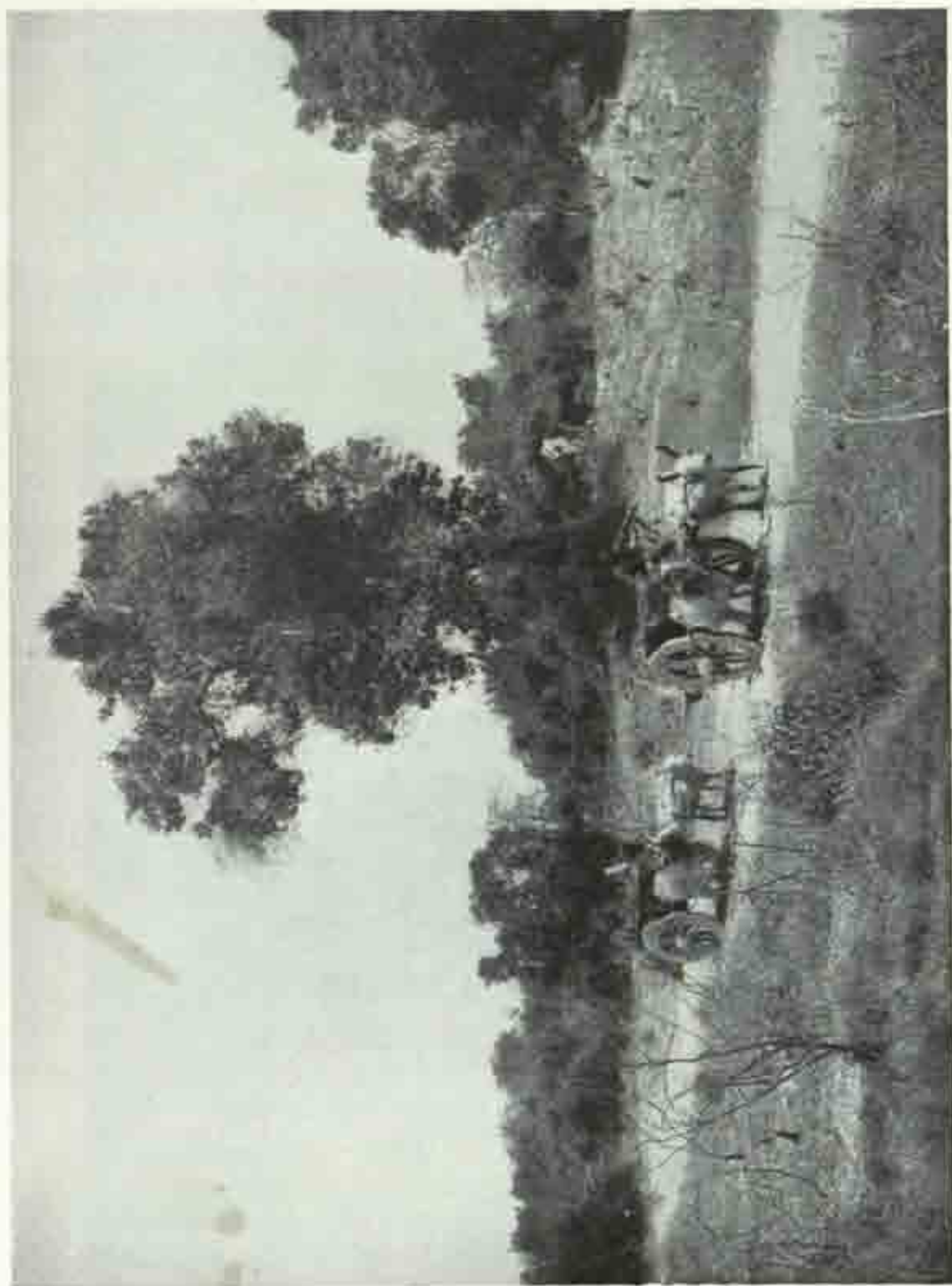
B. Tilaura-kot: jungle-clad mound. See p. 9



Tilaurā-kot: jungle-clad eastern rampart and flanking dried-up moat. See p. 9



Tilaura-kot: eastern gate with rampart before jungle-clearance. See p. 9



Tilaura-kot: eastern gate with rampart after partial jungle-clearance. See p. 9.



A. Tilaúra-kot: Sāmāi-māyī temple. See p. 9



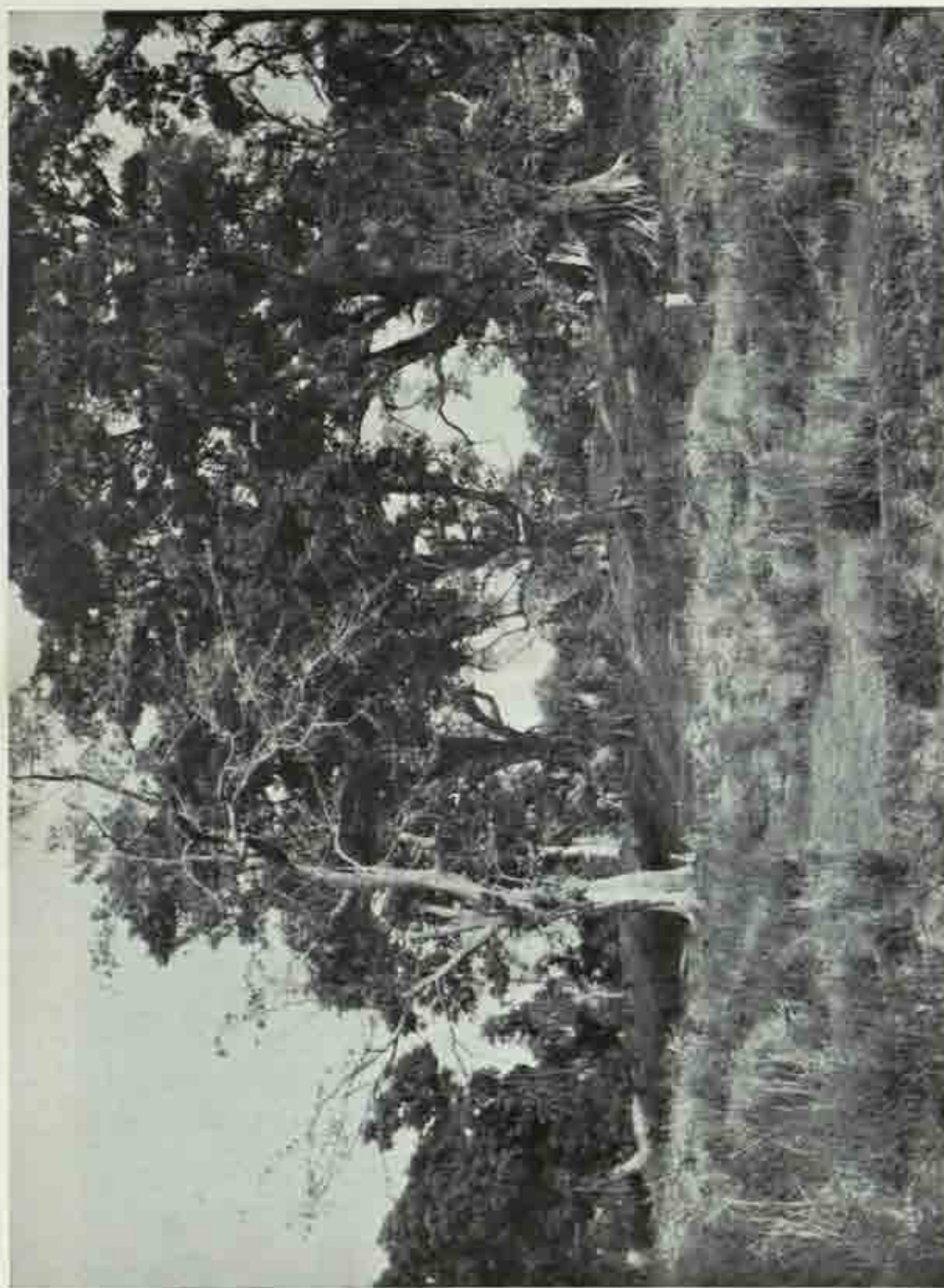
B. Tilaúra-kot: terracotta animals offered to Sāmāi-māyī. See p. 9



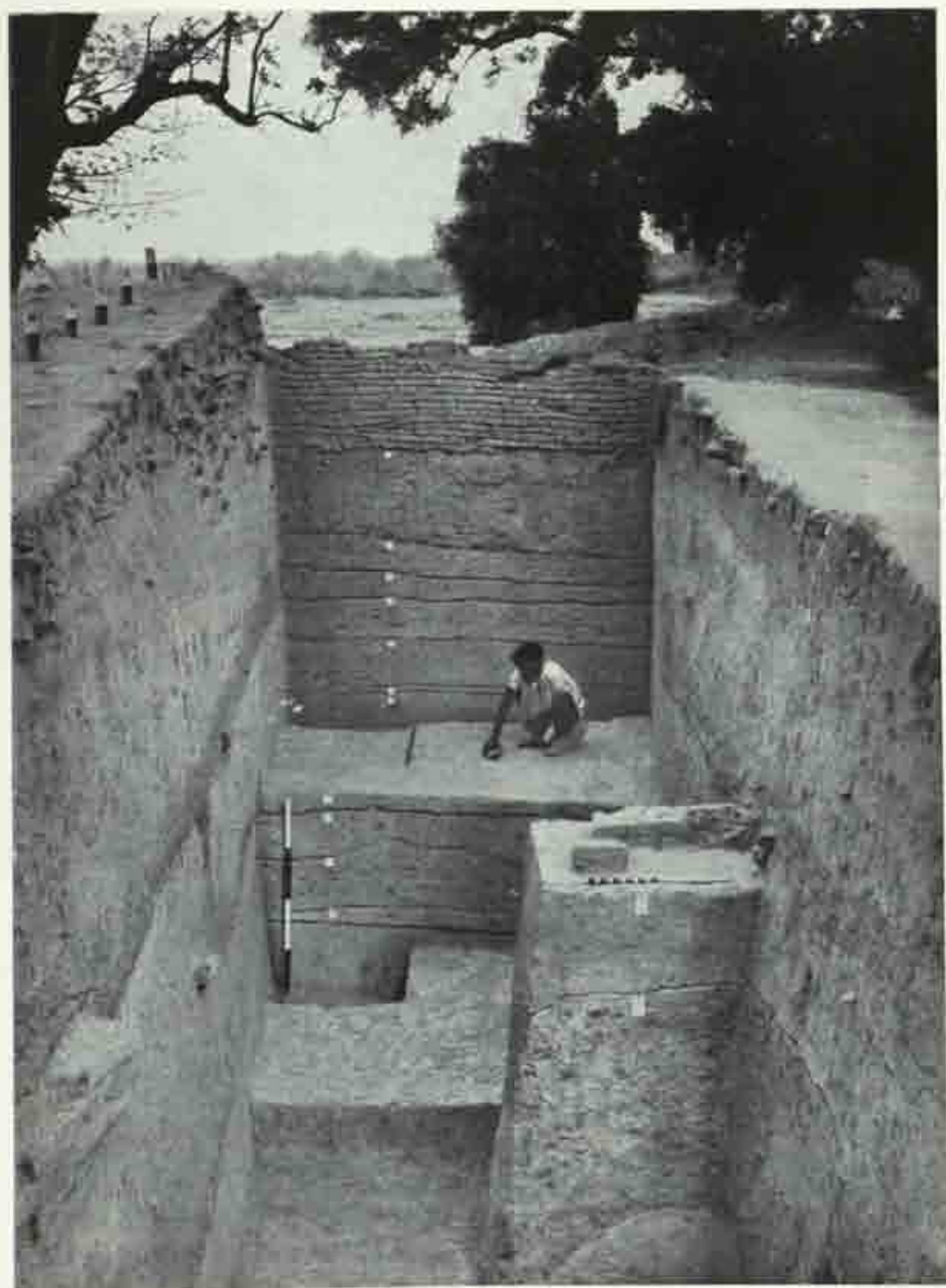
A. Tilaura-kot: a part of the rampart after partial jungle-clearance. See p. 11



B. Tilaura-kot; north-eastern corner of the fortified mound. See p. 11



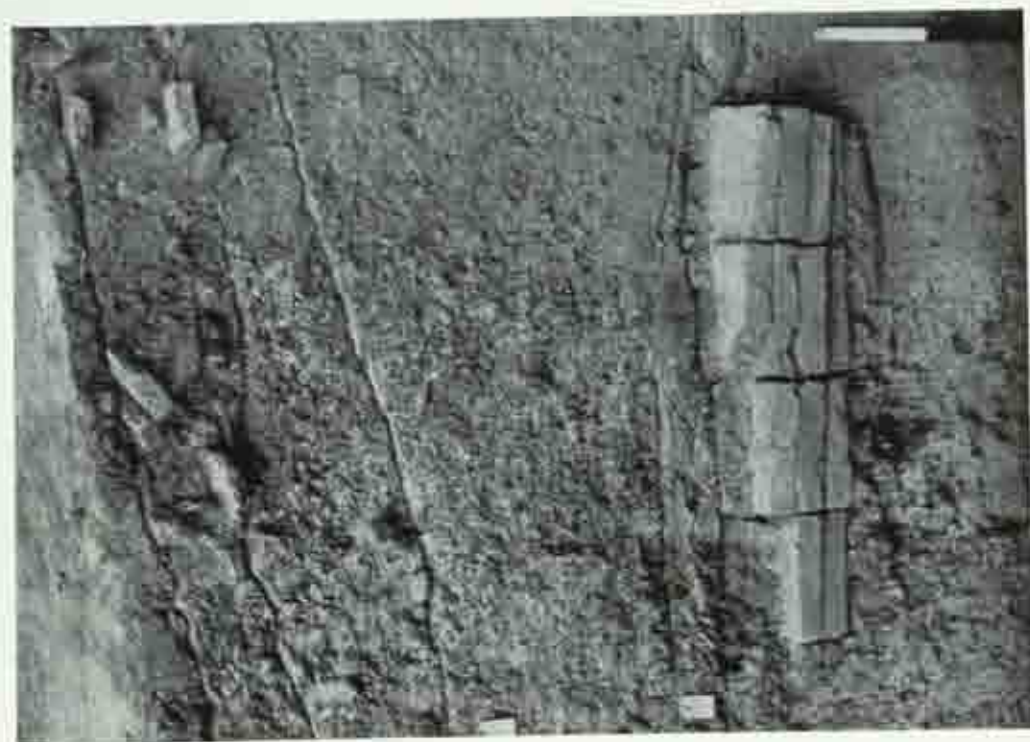
Tilaura-kot: northern rampart in which the trench TLK-I was laid. See p. 11



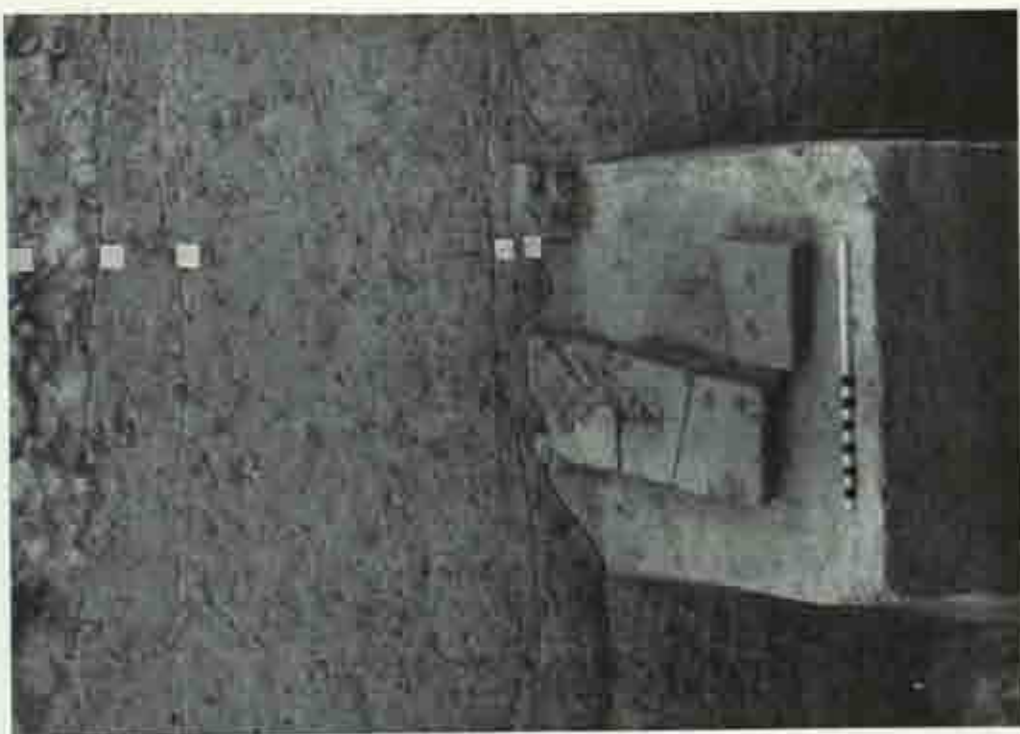
Tilaura-kot: a view of the trench TLK-1 with the inner (southern) face of the brick fortification-wall immediately over the mud rampart and the floor (on which a worker is seen). See pp. 11 and 12



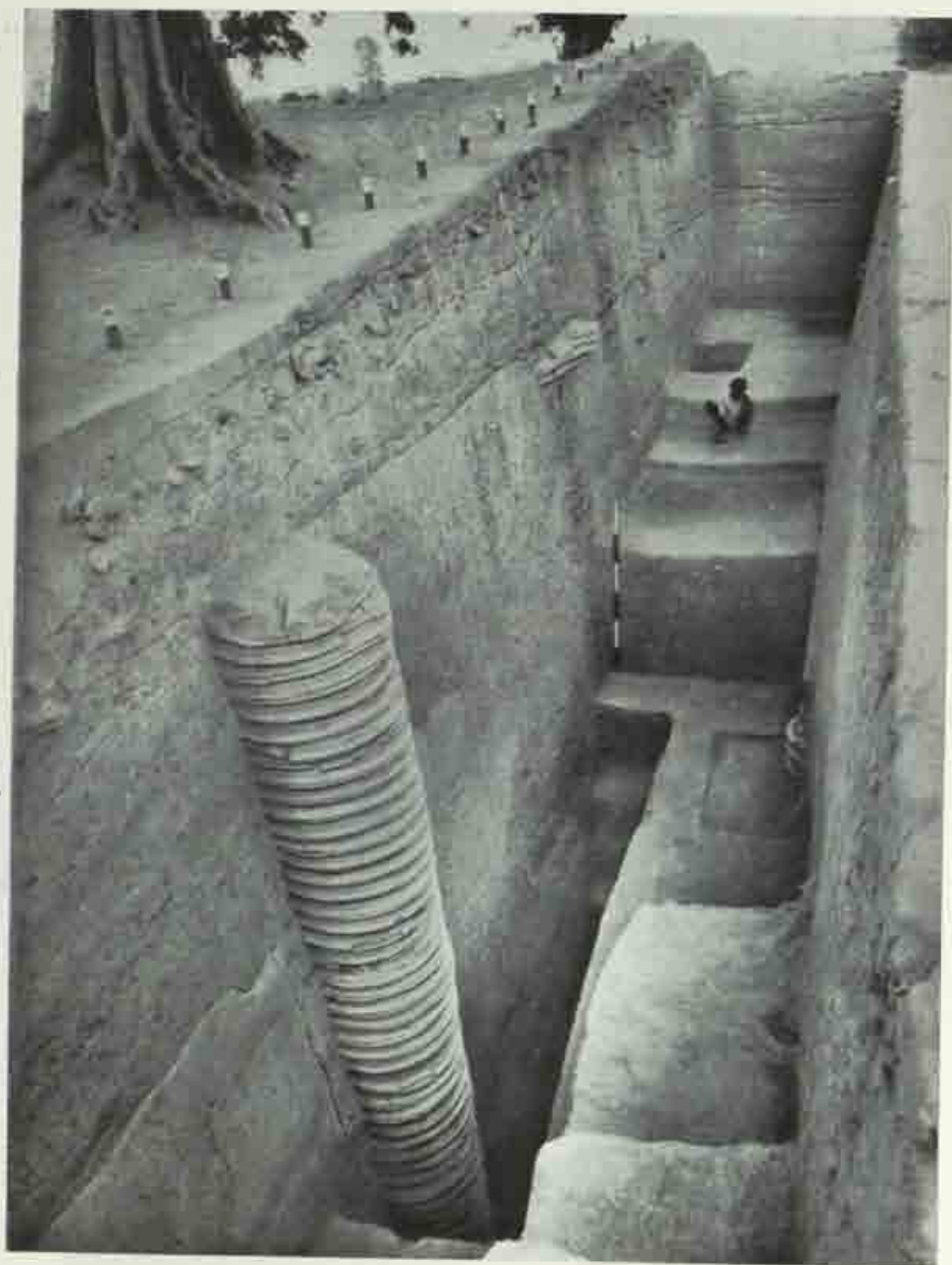
Tilaura-kot: a view of the trench TLK-1 with the outer (northern) face of the brick fortification-wall. See pp. 11 and 12



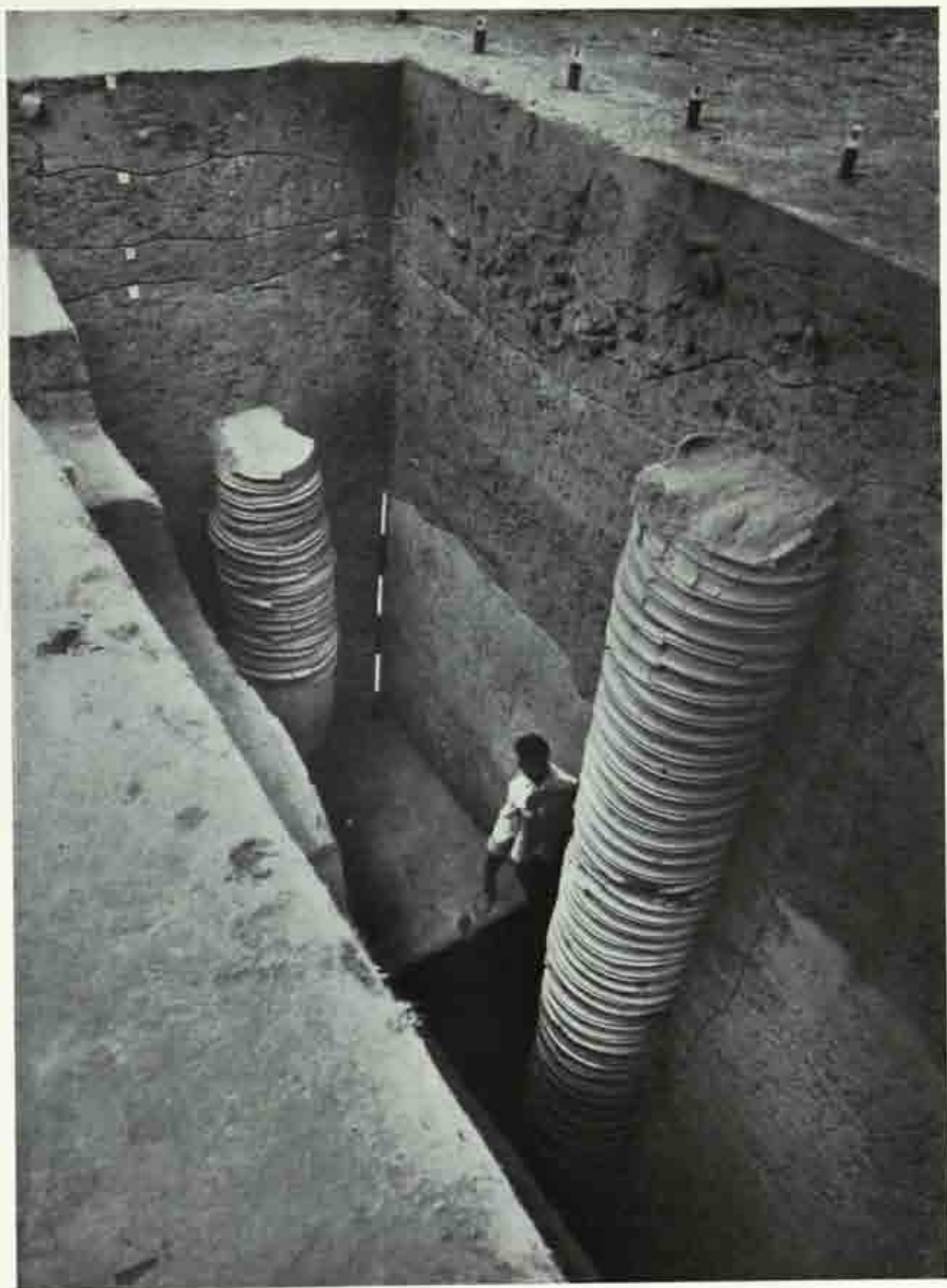
A. Tilaura-kot: Structure 1. See p. 13



B. Tilaura-kot: Structure 2. See p. 13



Tilaura-kot: view of the trench TLK-I with Ring-well 1. See p. 13



Tilaura-kot: view of the trench TLK-1 with Ring-wells 1 and 2. See pp. 13 and 14

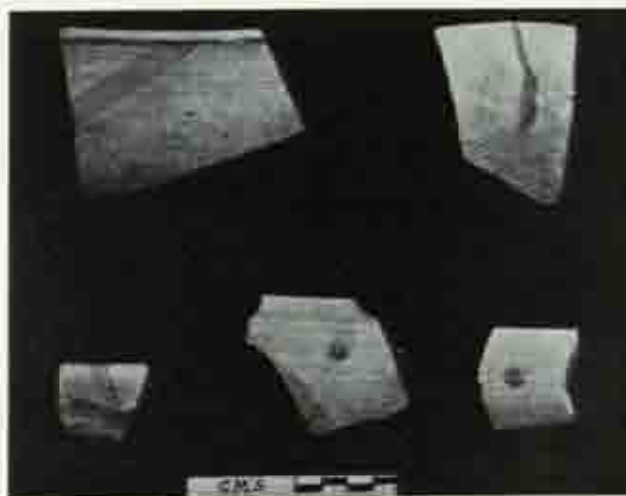
PLATE XXII



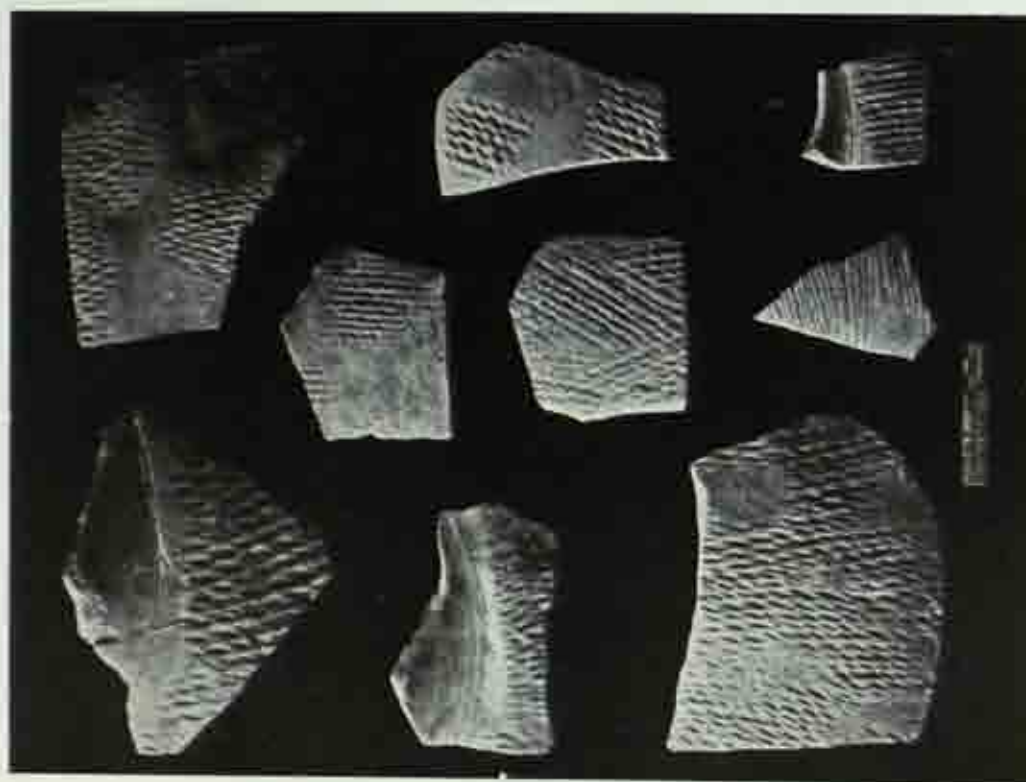
Tilauna-kot: sherds with graffiti. See pp. 17 and 18



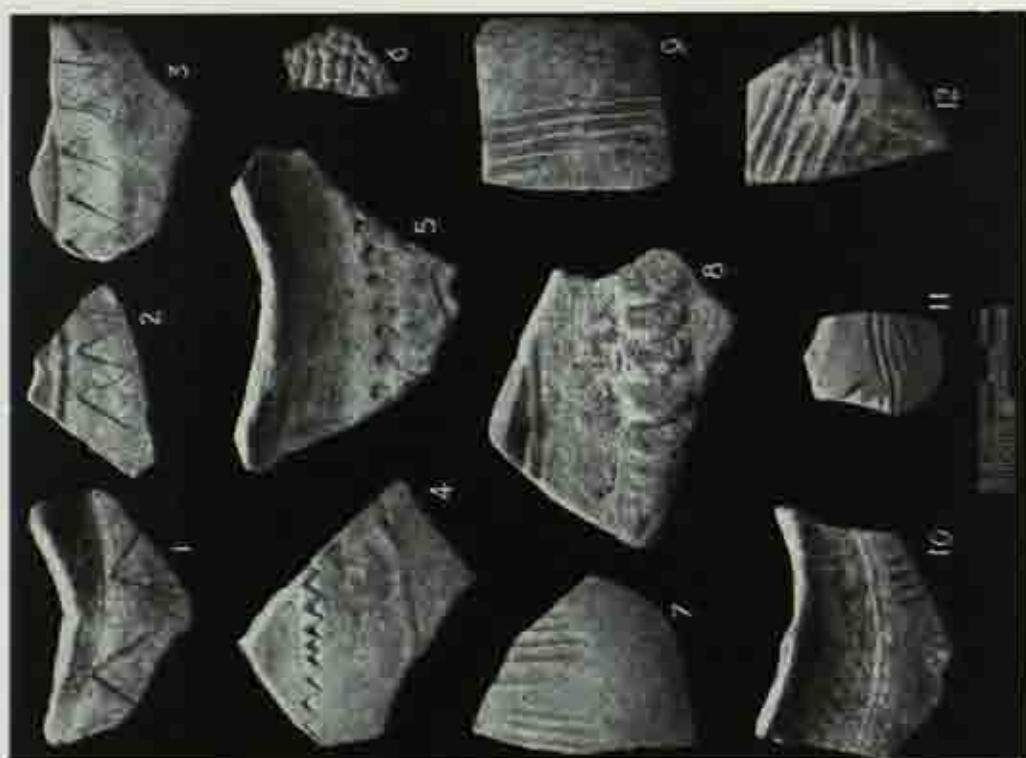
A. Tilauna-kot: sherds of red ware with painted bands. See p. 22



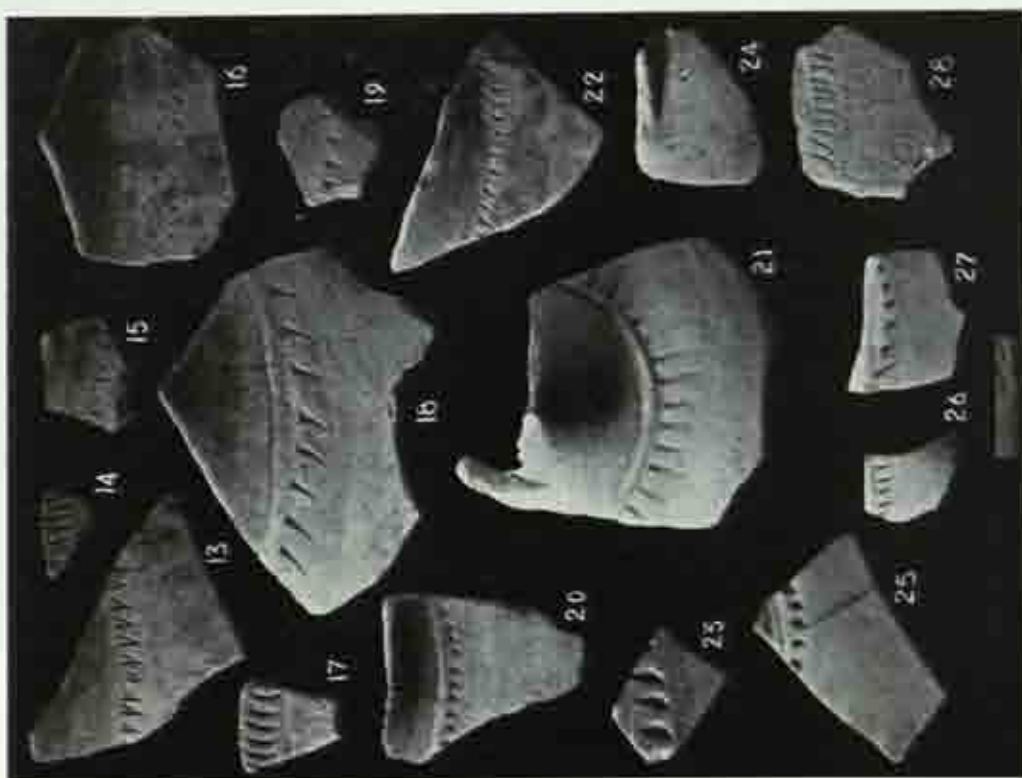
B. Tilauna-kot: sherds of grey ware with indifferent paintings (?). See p. 23



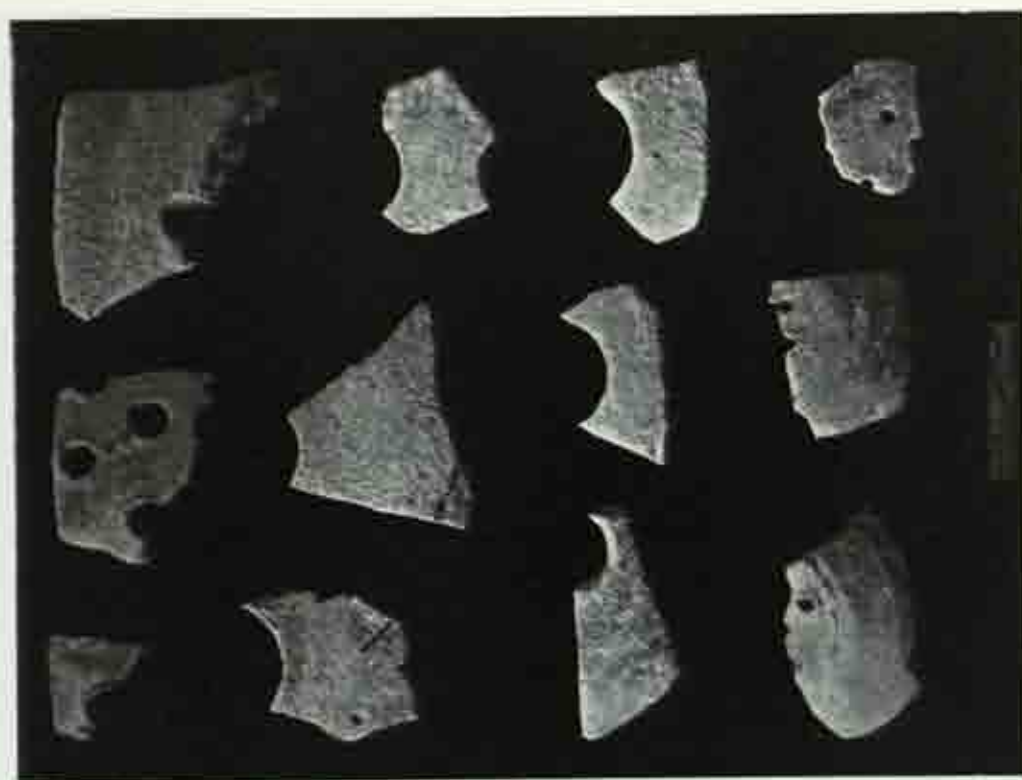
A. Tilauna-kot: impressed sherds of red ware. See p. 22



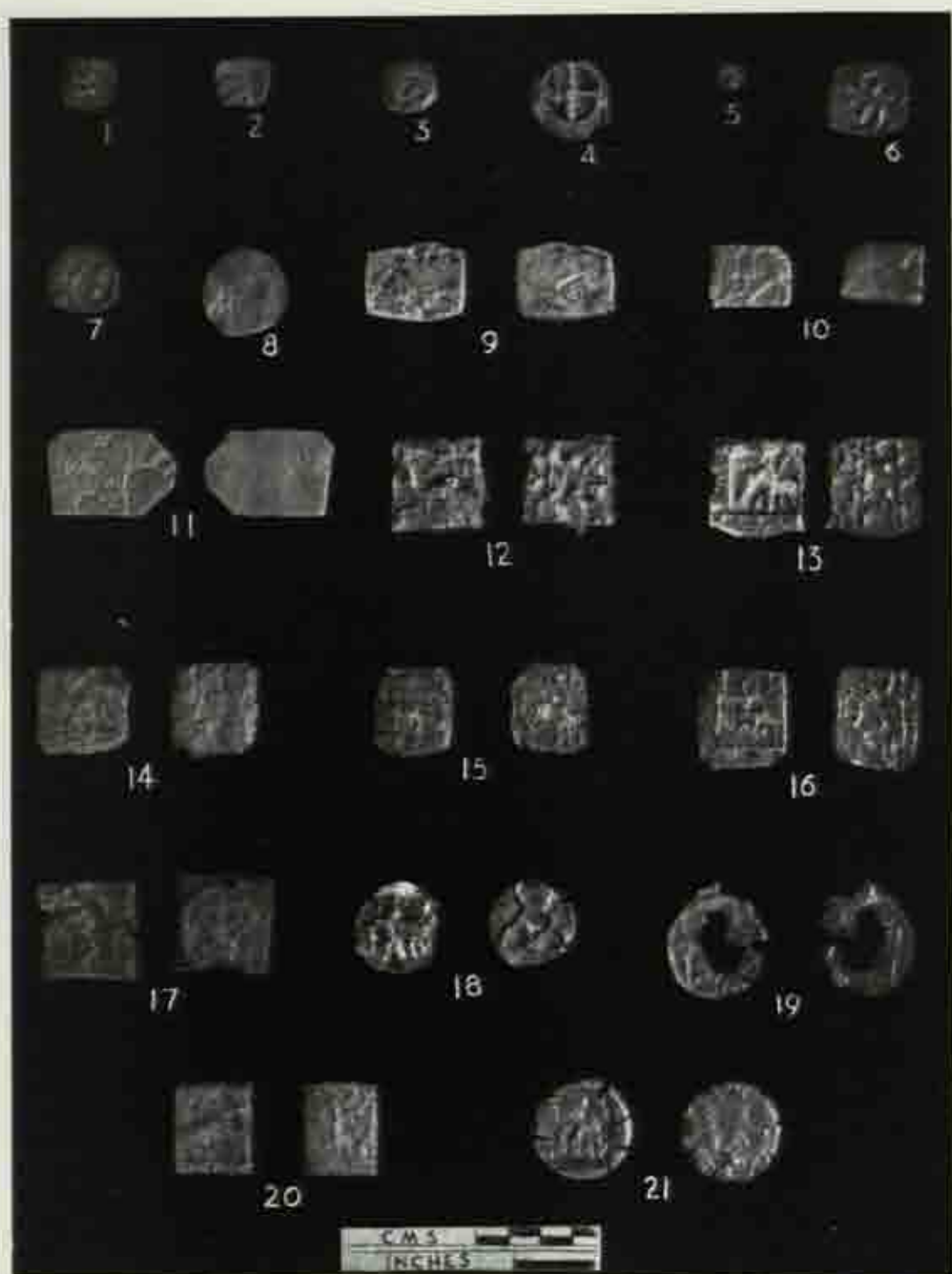
B. Tilauna-kot: incised and decorated sherds of red ware. See p. 22



A. Tilaura-kot; incised sherds of red ware. See p. 22



B. Tilaura-kot; perforated sherds of red ware. See p. 22



Tilaura-kot: coins. See pp. 85-99



Tilaura-kot: 1 and 3, terracotta sealings; 2, terracotta ball with stamped symbols; 4 and 5, inscribed sherds; 6 and 7, sherds with stamped wheels. See pp. 15, 16, 17, 99 and 100



Tilaura-kot: terracotta human figurines. See pp. 100, 101, 102 and 108



Tilaura-kof: terracotta human figurines. See pp.101,102 and 103



Tilaura-kot; terracotta human figurines. See pp. 101, 103 and 104



Tilaure-kot: terracotta human figurines. See pp. 104, 105 and 106



Tilaura-kot: terracotta human figurines. See pp. 101, 105 and 106



Tilaura-kot: terracotta human figurines. See pp. 106 and 107.



Tilaura-kot: terracotta human figurines and a fragment of a plaque with Gaja-Lakshmi (?). See pp. 101, 102, 107 and 108.



Tilaura-kot: terracotta human figurines. See pp. 102 and 108



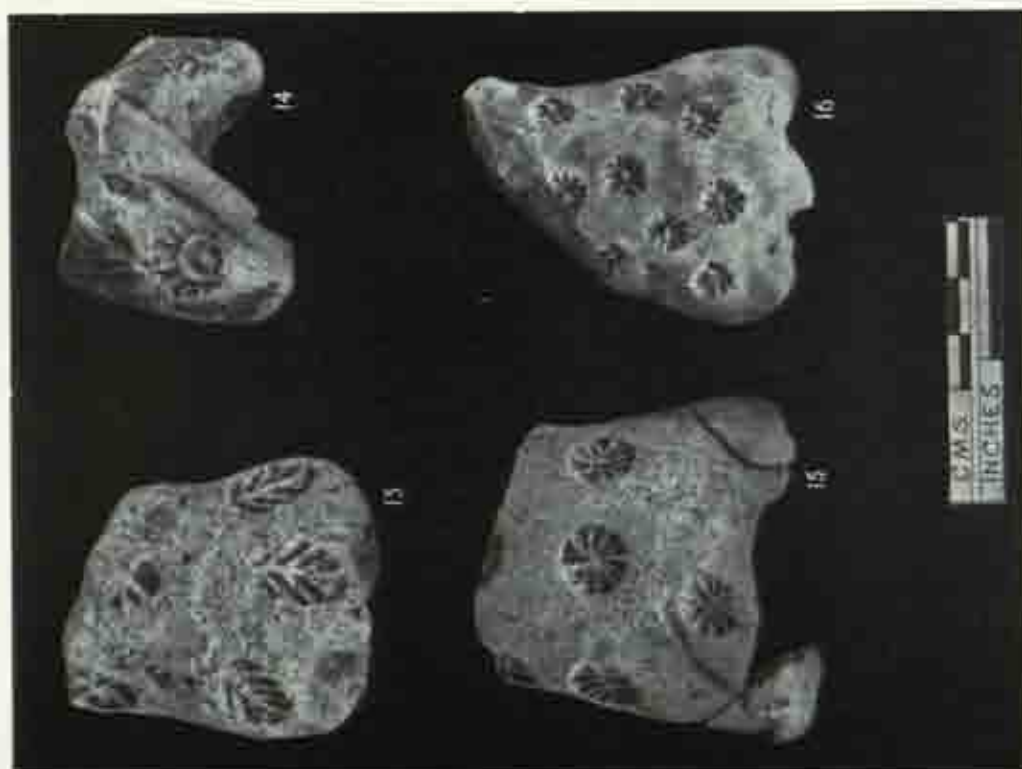
A. Tilaura-kot; terracotta elephants; See pp. 109, 112 and 113



B. Tilaura-kot; terracotta animals; See pp. 109 and 113



B. Tilaure-kot: terracotta animals. See pp. 110 and 114



A. Tilaure-kot: terracotta elephants. See pp. 109, 113 and 114

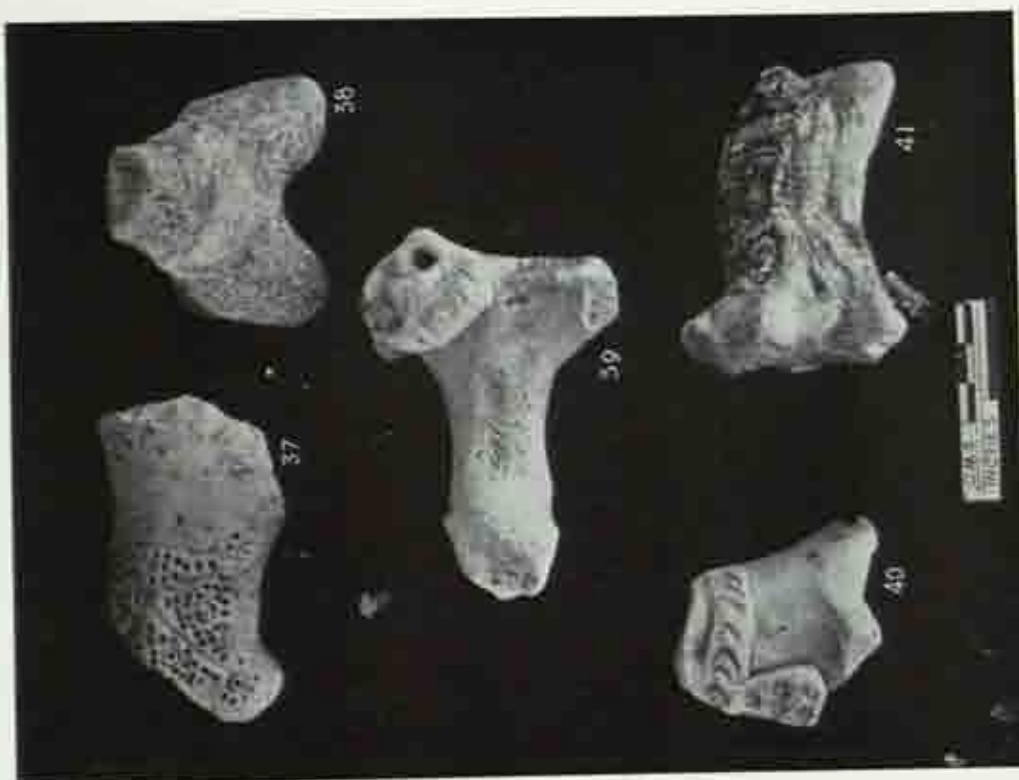
PLATE XXXVIII



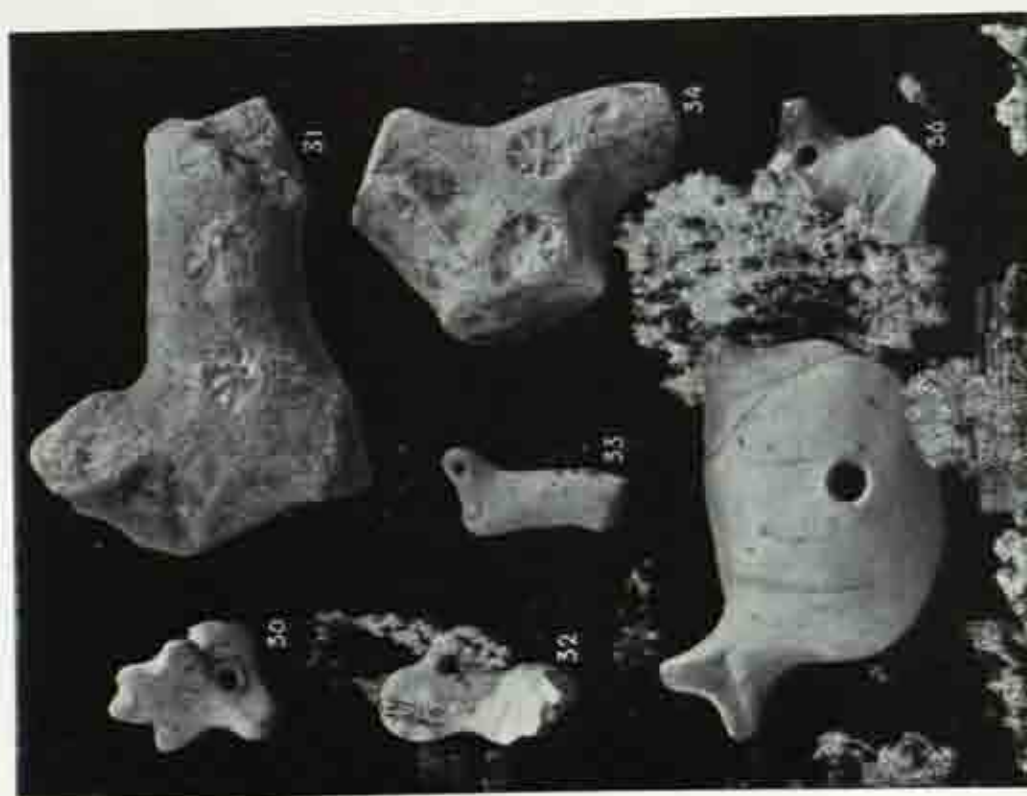
B. Tilaura-kot: terracotta horse and wheel. See pp. 111, 115 and 117



Tilaura-kot: terracotta horses. See pp. 110, 111, 114 and 115



B. Tilaura-kot; terracotta animals.
See pp. 111, 112 and 116



A. Tilaura-kot; terracotta animals and birds.
See pp. 111, 115 and 116

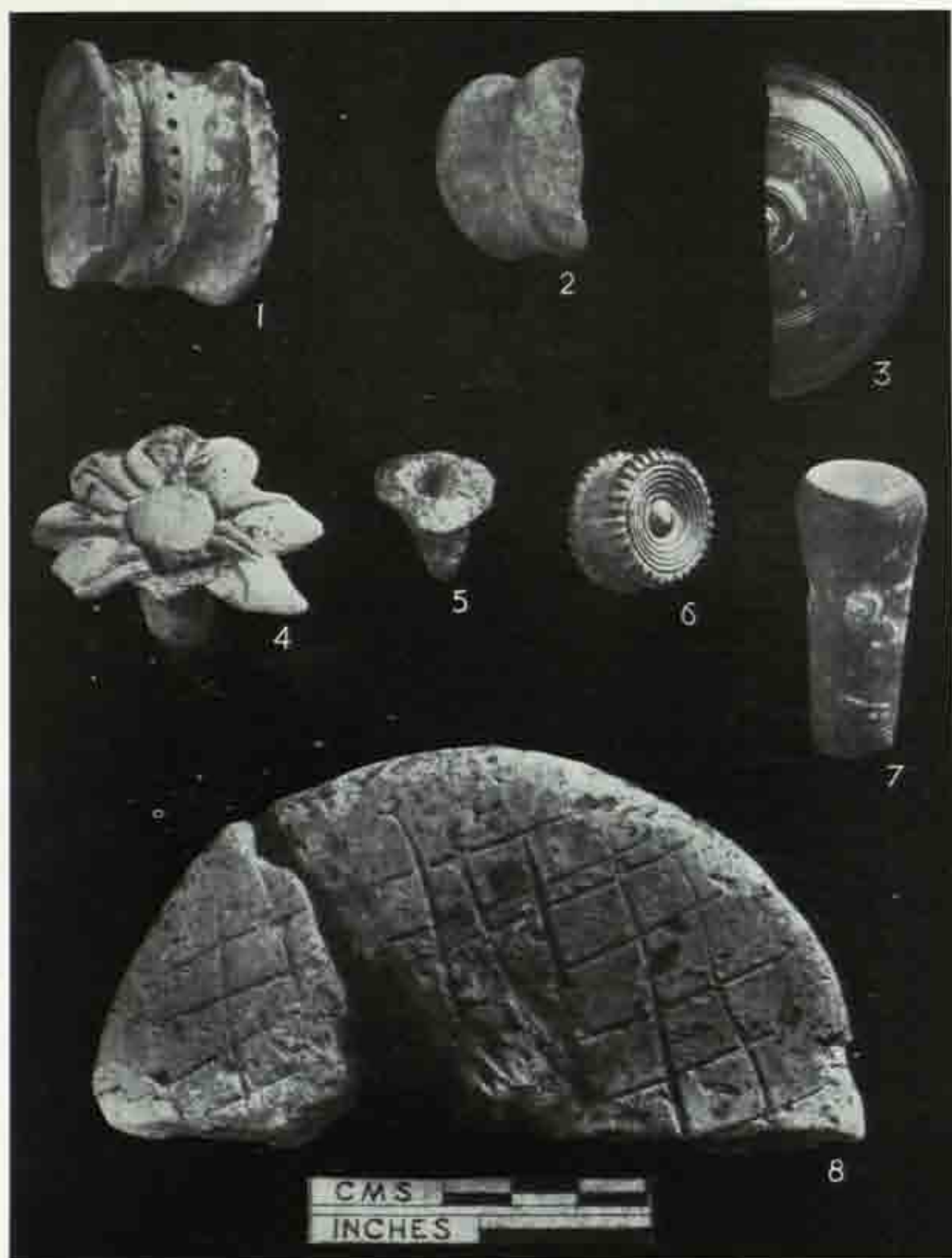
PLATE XL



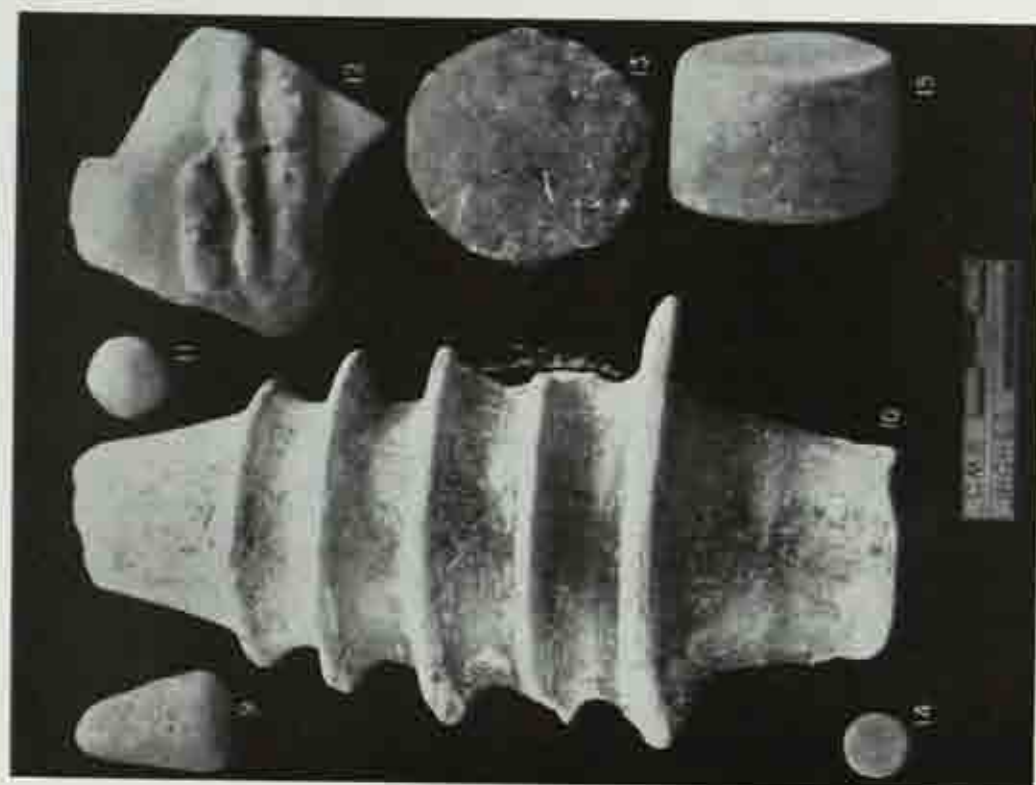
A. Tilaure-kot: terracotta toy-carts. See pp. 116 and 117



B. Tilaure-kot: terracotta muller or po'isher. See pp. 119 and 120



Tilaura-kot: miscellaneous terracotta objects. See pp. 118 and 119



A. Tilaura-kot : miscellaneous terracotta objects.
See pp. 117, 118, 119 and 120



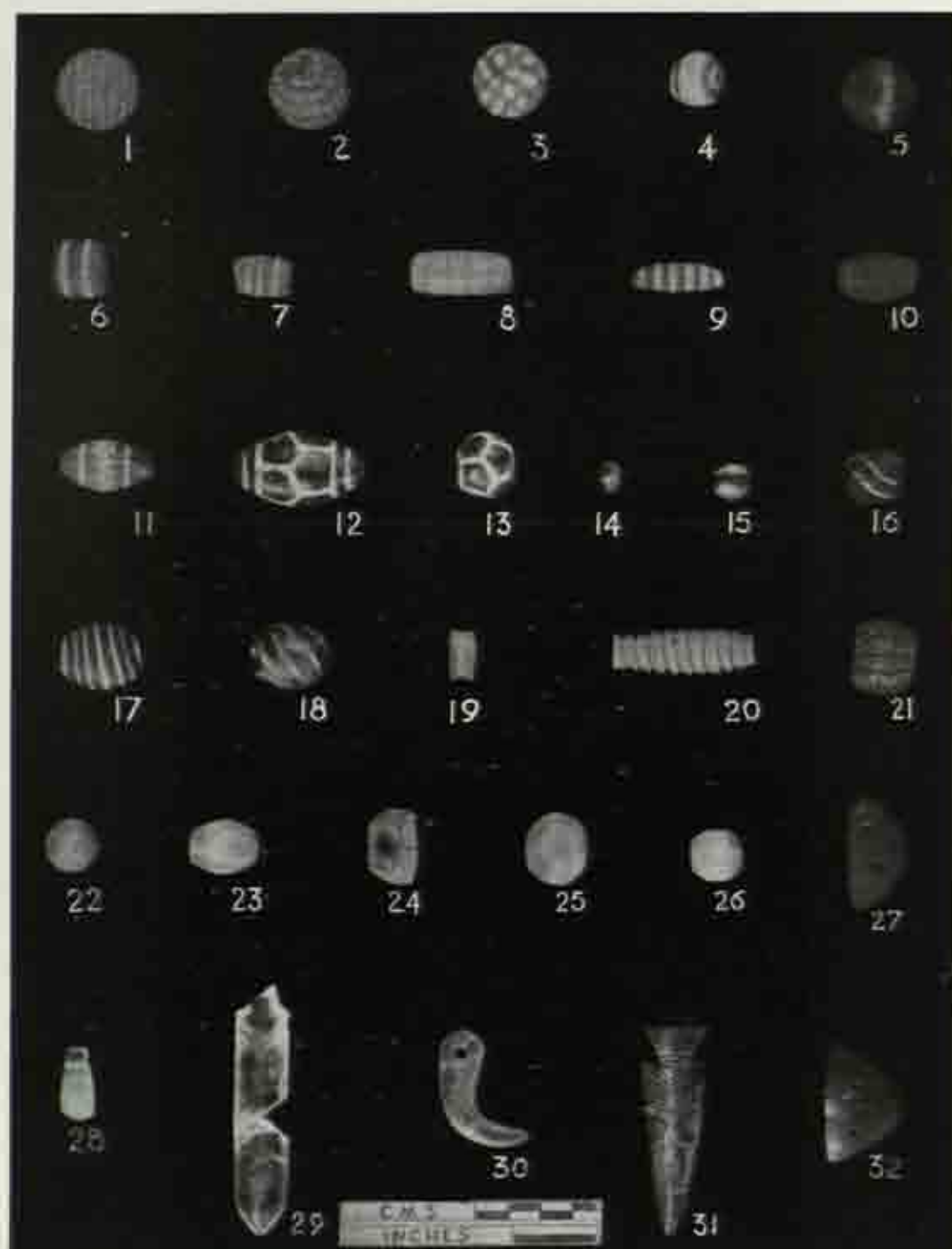
B. Tilaura-kot : miscellaneous terracotta objects.
See pp. 119 and 120



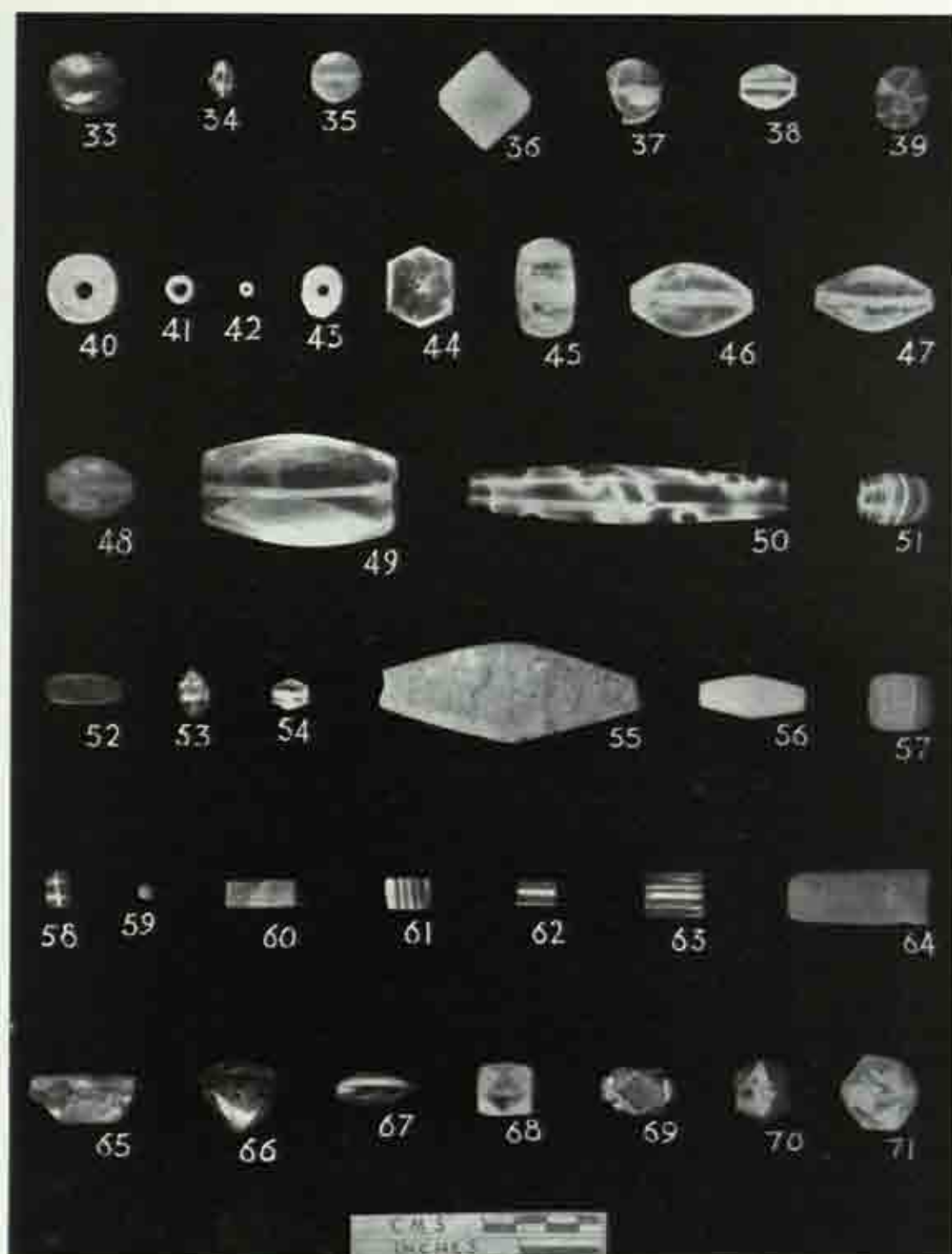
A. Tilaura-kot: stone stool-quern and muller.
See pp. 120, 121 and 122



B. Tilaura-kot: miscellaneous stone objects.
See pp. 121 and 122

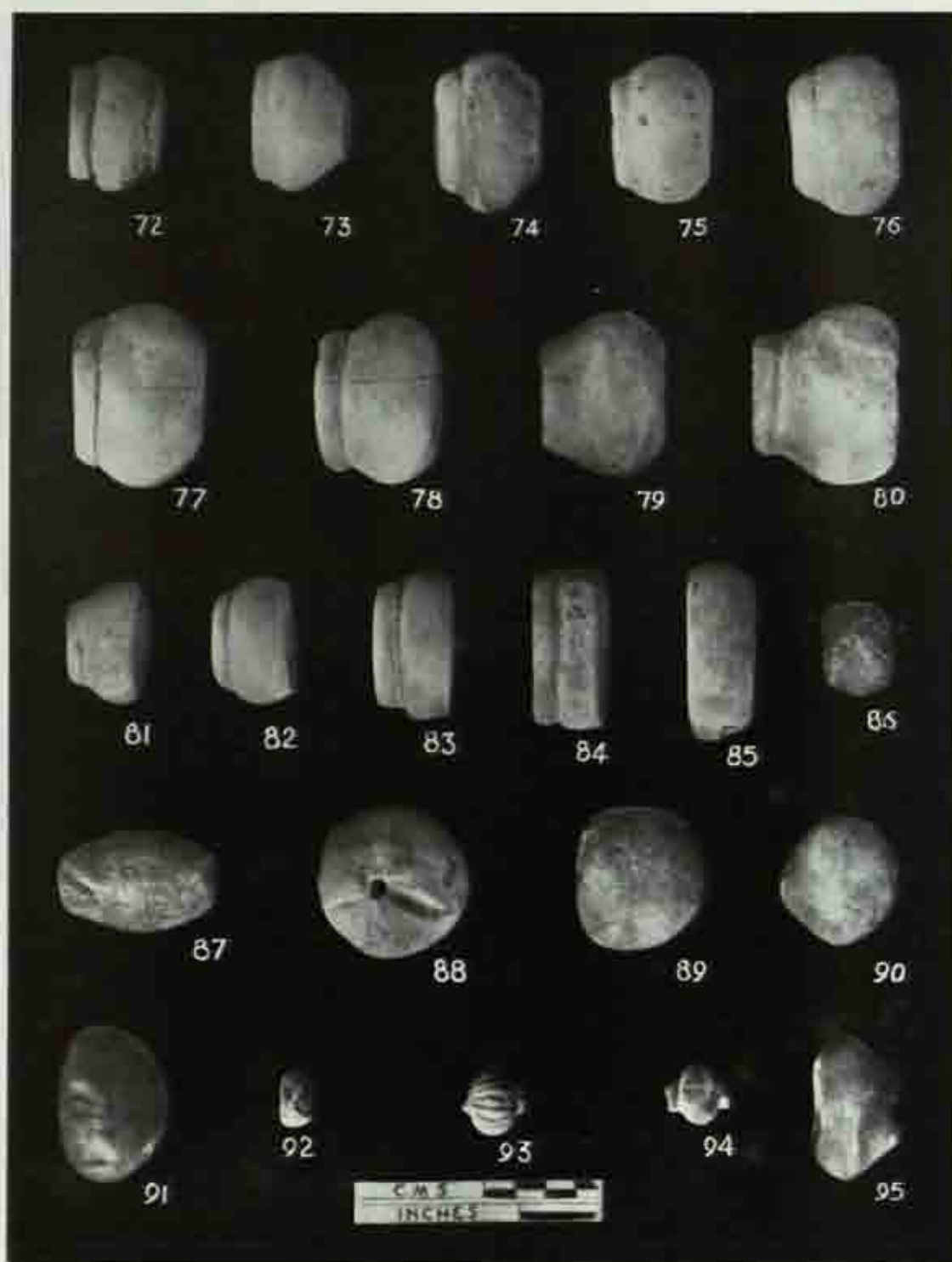


Tilaura-kot: beads. See pp. 123, 124, 125, 126, 127, 128, 129, 130, 132, 133, 134, 135, 136 and 144

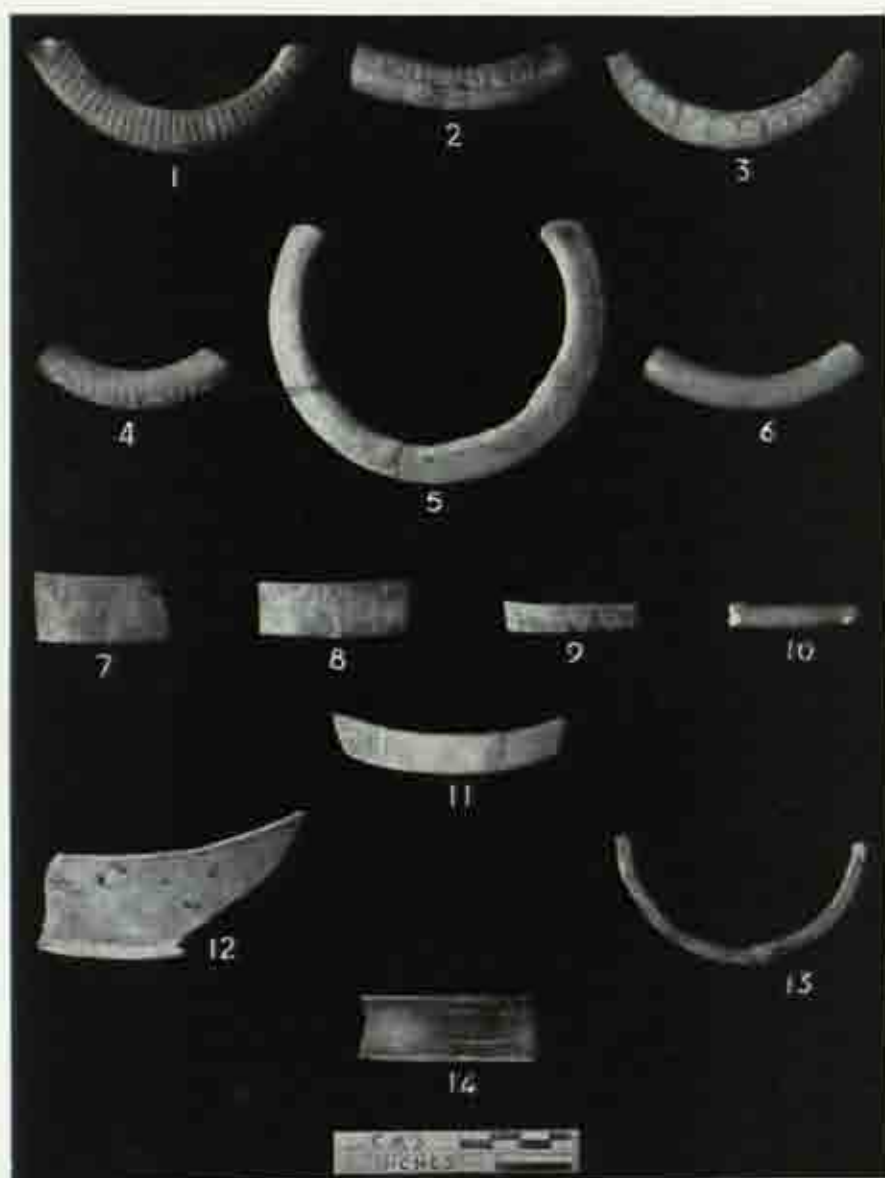


Tilaura-kot: beads. See pp. 123, 124, 126, 127, 128, 129, 130, 131, 133, 135, 136, 137, 138, 139 and 144

PLATE XLVI



Tilaura-kot: terracotta beads. See pp. 124, 131, 132, 138, 139, 140 and 141



A. Tilaura-kot: bangles. See pp. 141-43

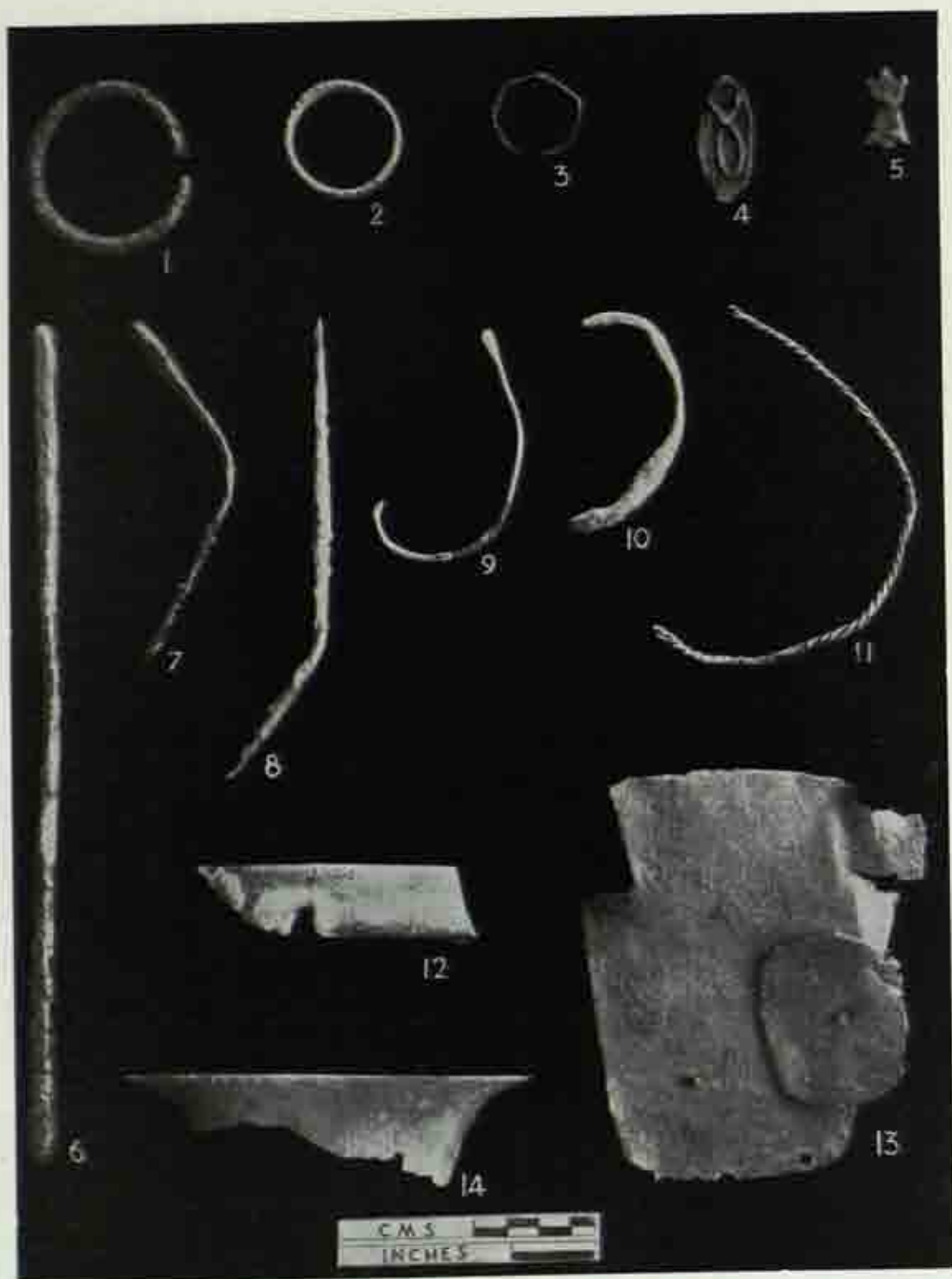


B. Tilaura-kot: gold objects. See p. 144



C. Tilaura-kot: miniature glass bowls. See p. 154

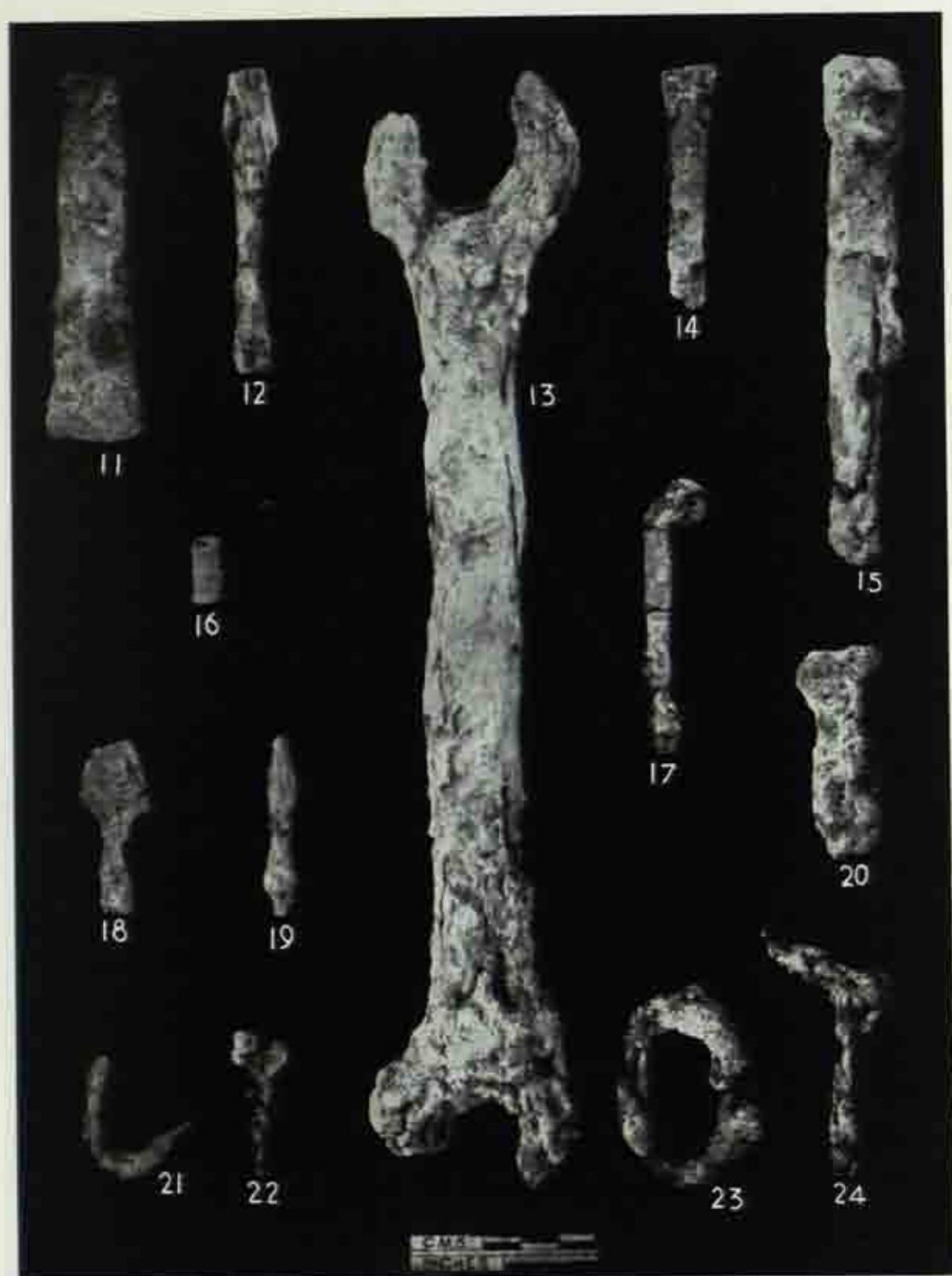
PLATE XLVIII



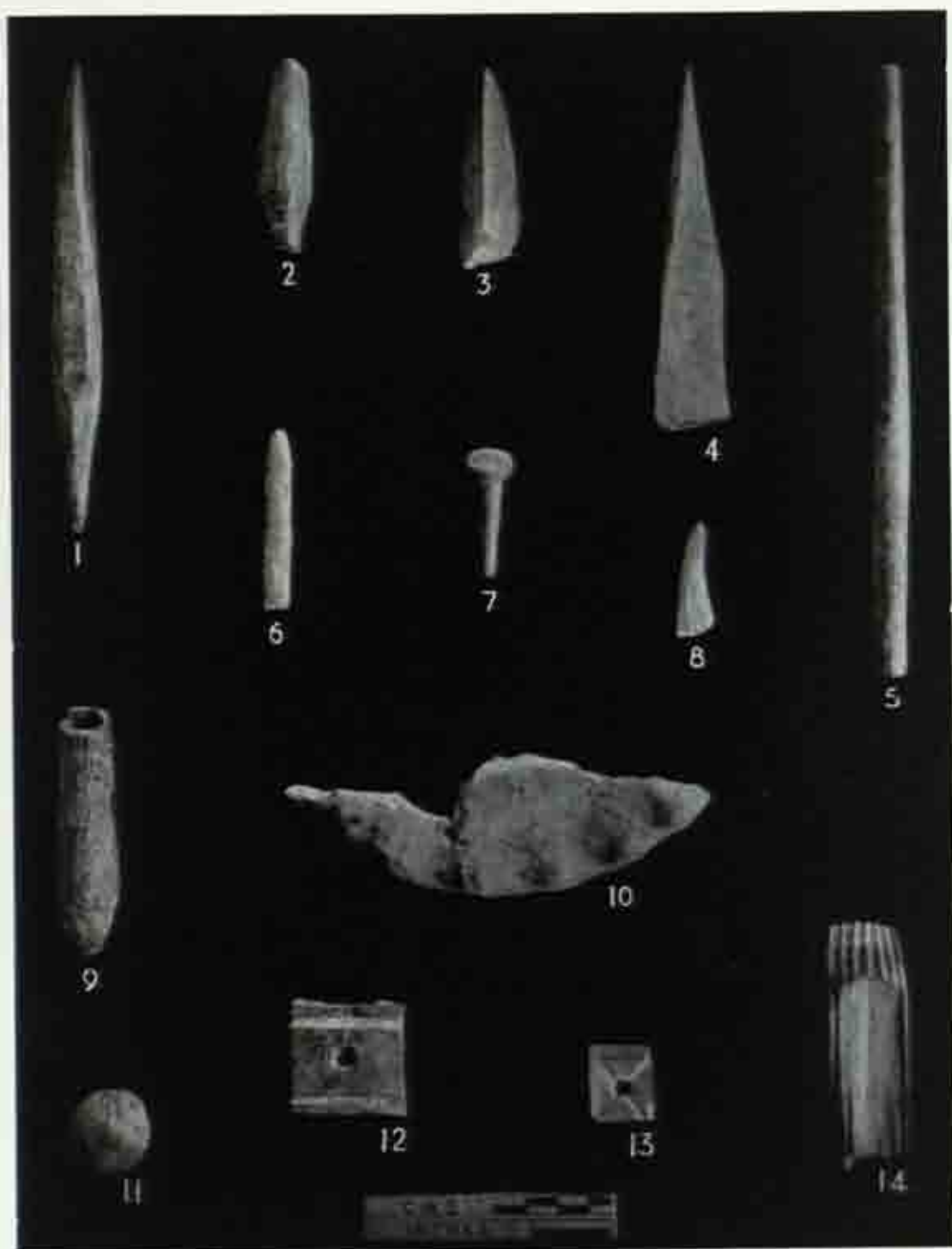
Tilaura-kot: miscellaneous copper objects and bronze vessels. See pp. 144-47



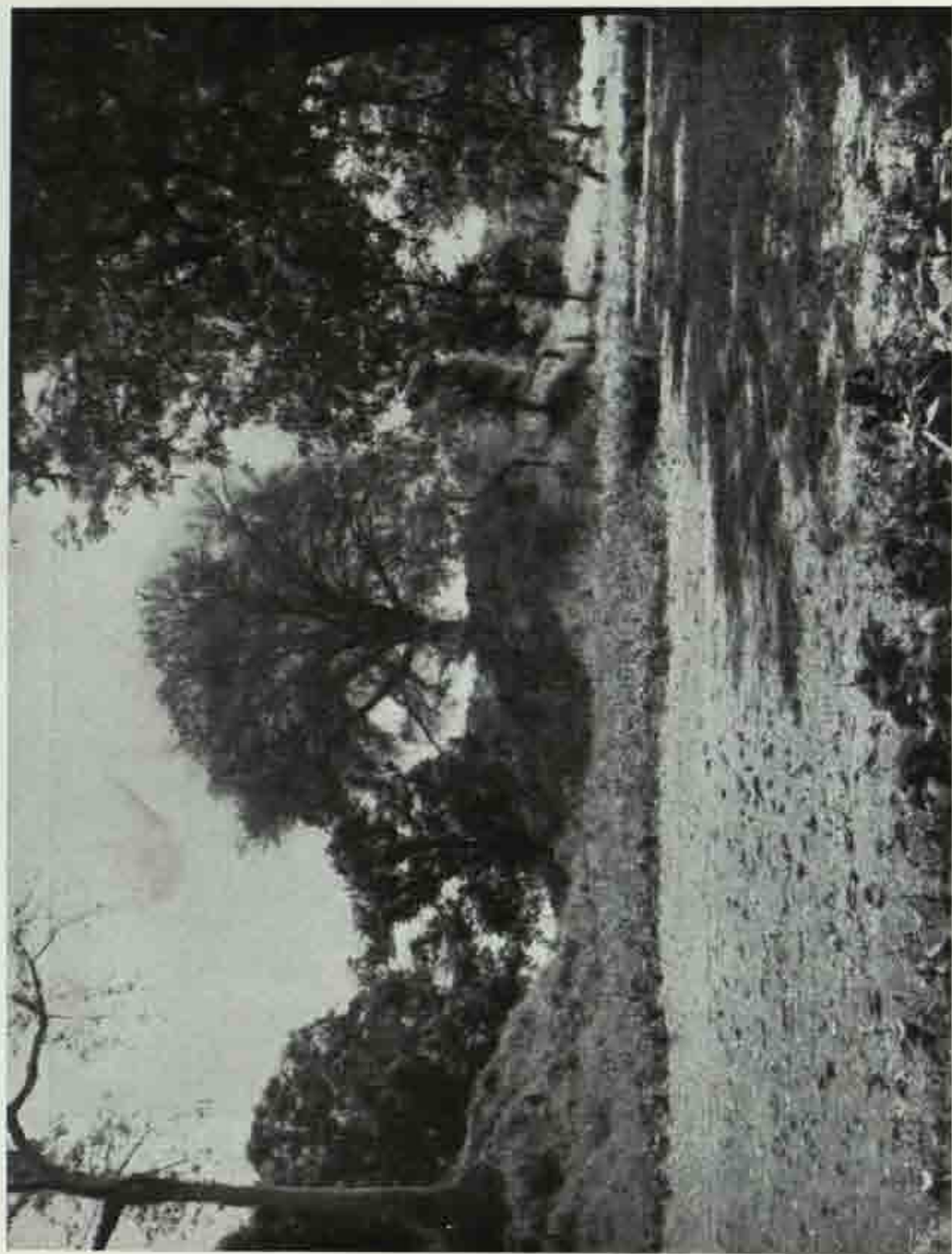
Tilaura-kot: iron nails. See pp. 148-50



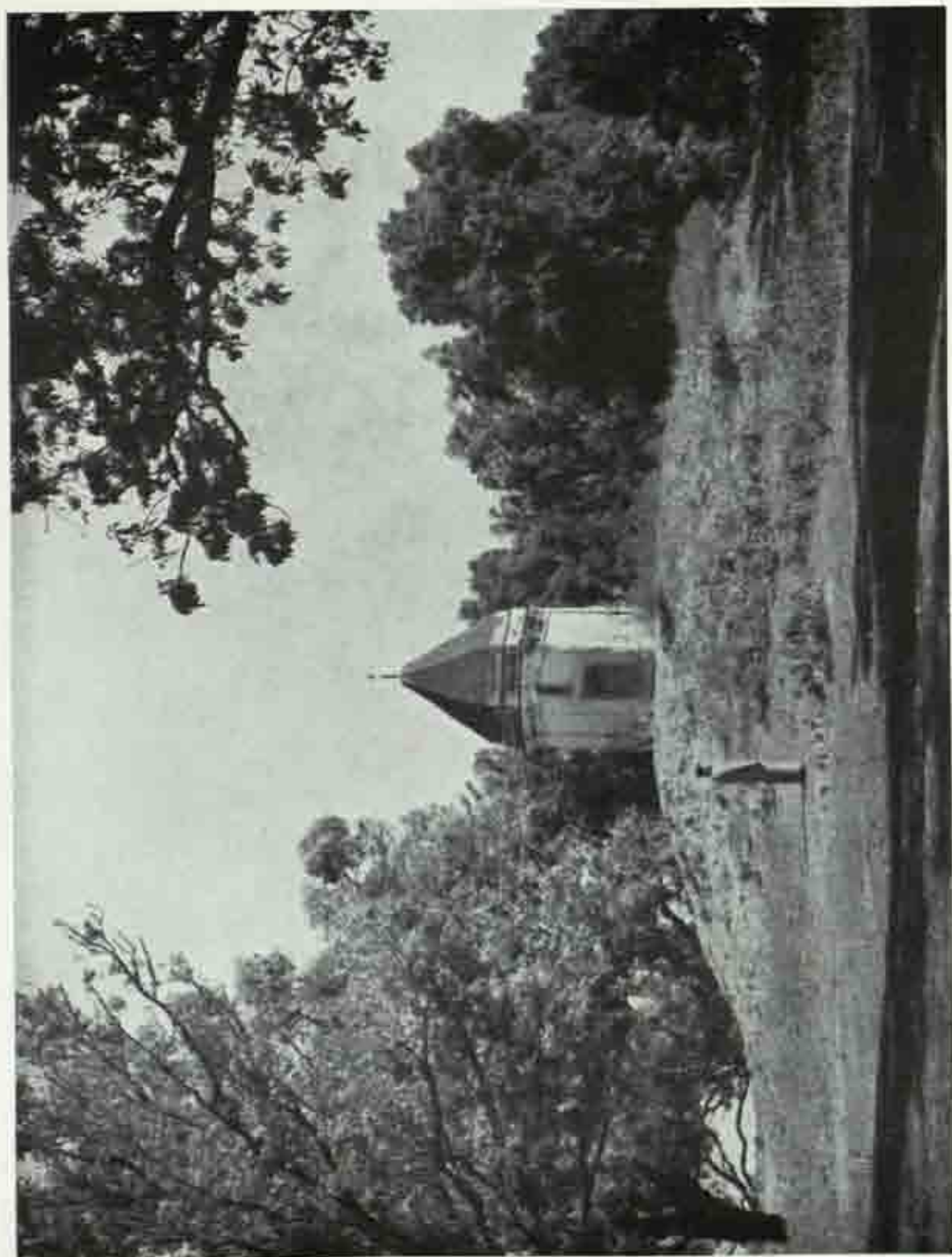
Tilaura-kot: miscellaneous iron objects. See pp. 148, 150, 151, and 152



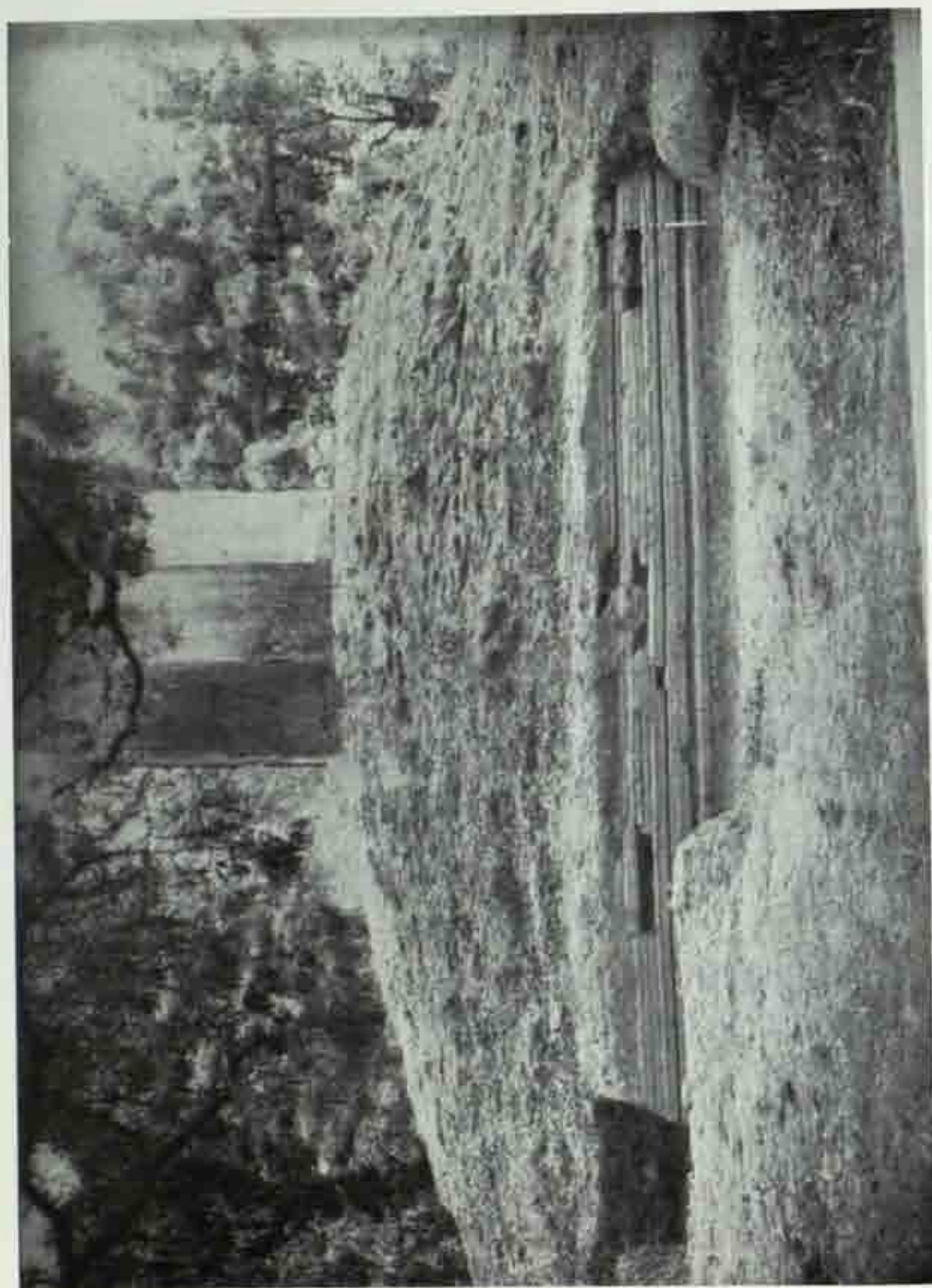
Tilaura-kot: miscellaneous bone and ivory objects. See pp. 152-54



Kodan: northernmost (dexter) and highest (sinister) mounds. See p. 158



Kodan: mound with an octagonal temple on top. See p. 158



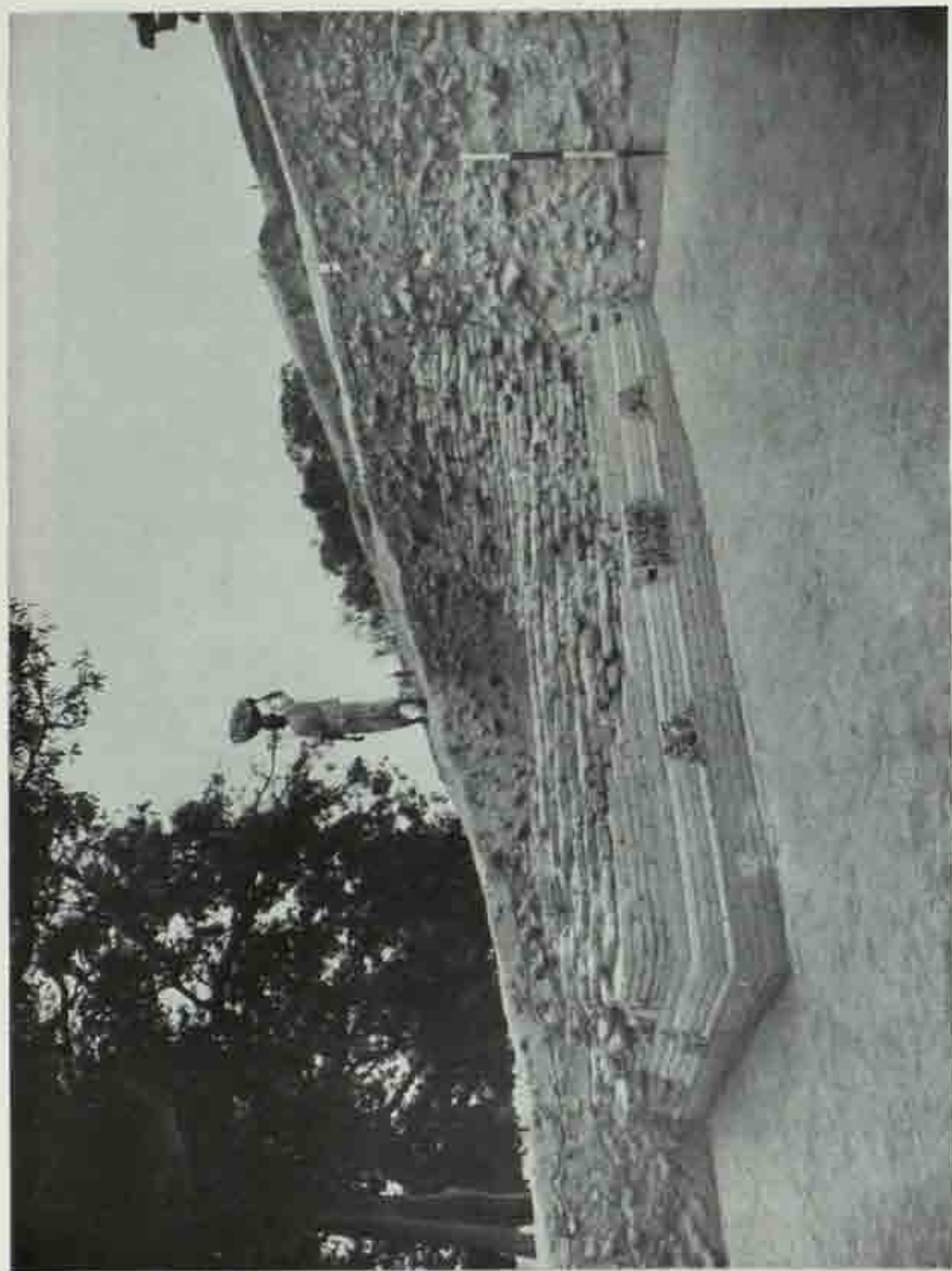
Kodan: partially-exposed platform of a temple buried within the mound supporting an octagonal temple. See p. 158



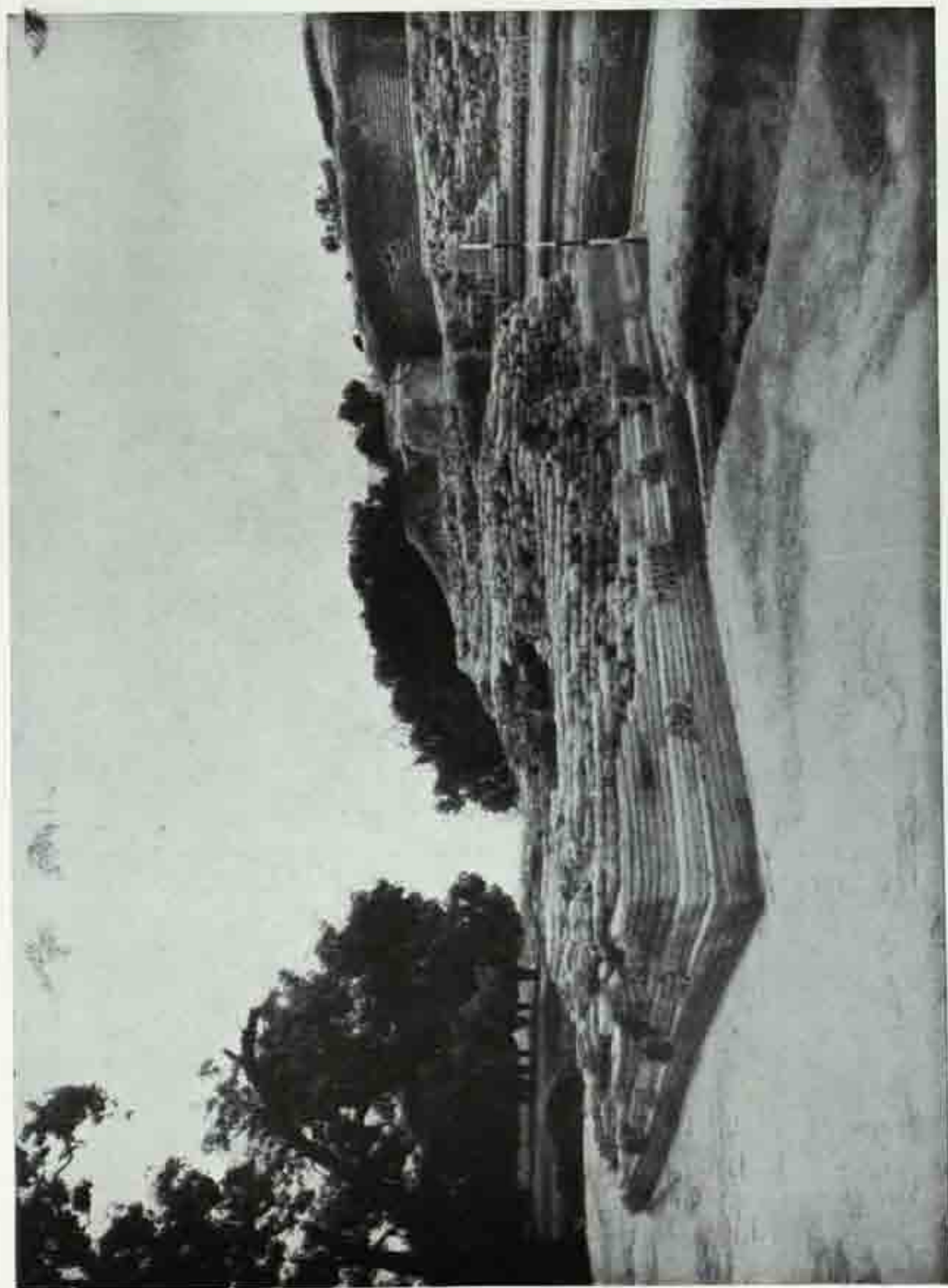
A. Kodan: *linga* found during the partial clearance of the mound with an octagonal temple on top. See p. 158



B. Kodan: partially-exposed wall of a temple buried within the mound supporting an octagonal temple. See p. 158



Kodan: well during excavation, north and west sides. See p. 163



Kodan: well after excavation, north and west sides. See p. 163



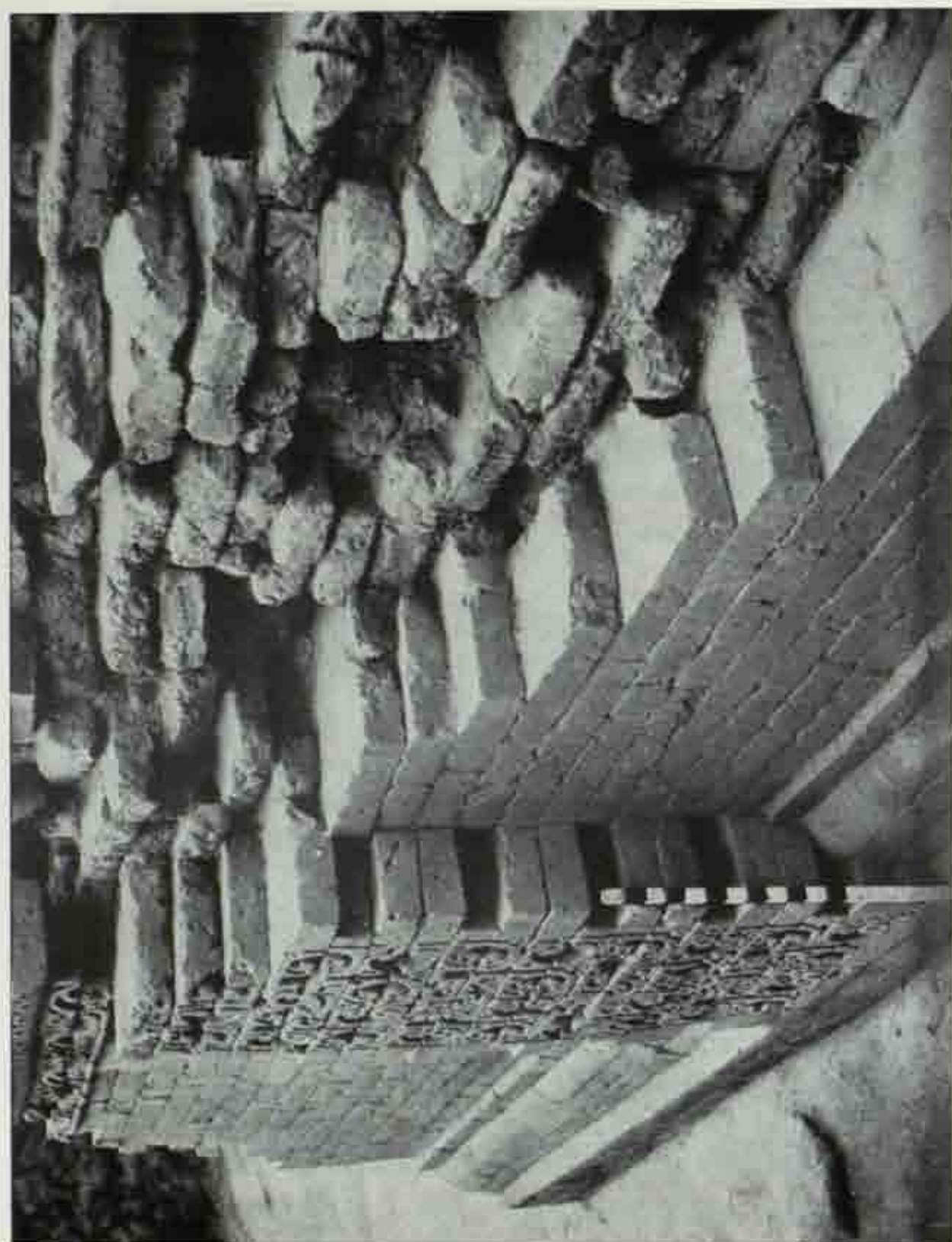
Kodan: fully-exposed well (foreground) and a part of Temple 1. See p. 163



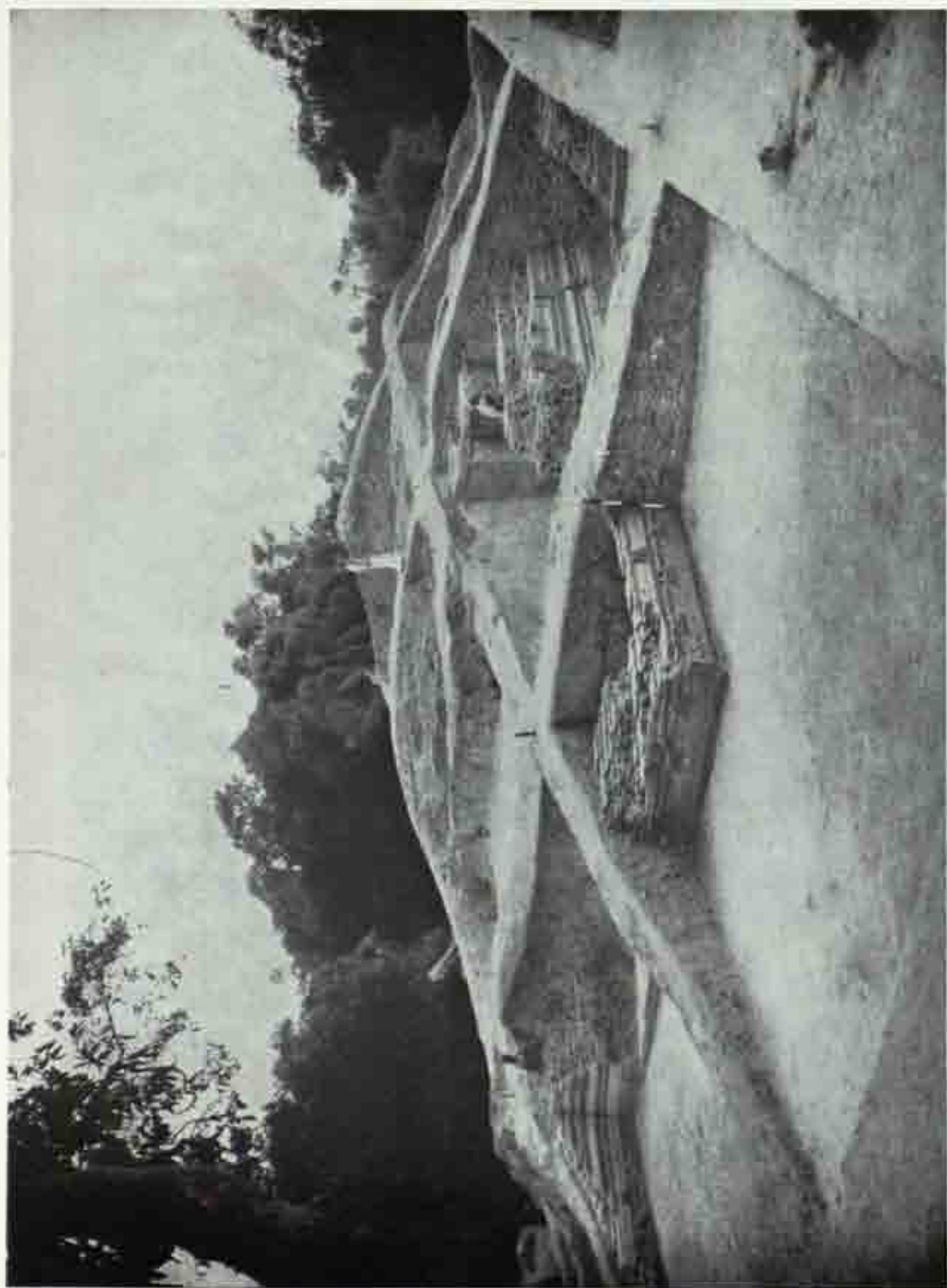
A. Kodan: well, interior with animal bones. See p. 164



B. Kodan: well during excavation, south and west sides. See p. 163



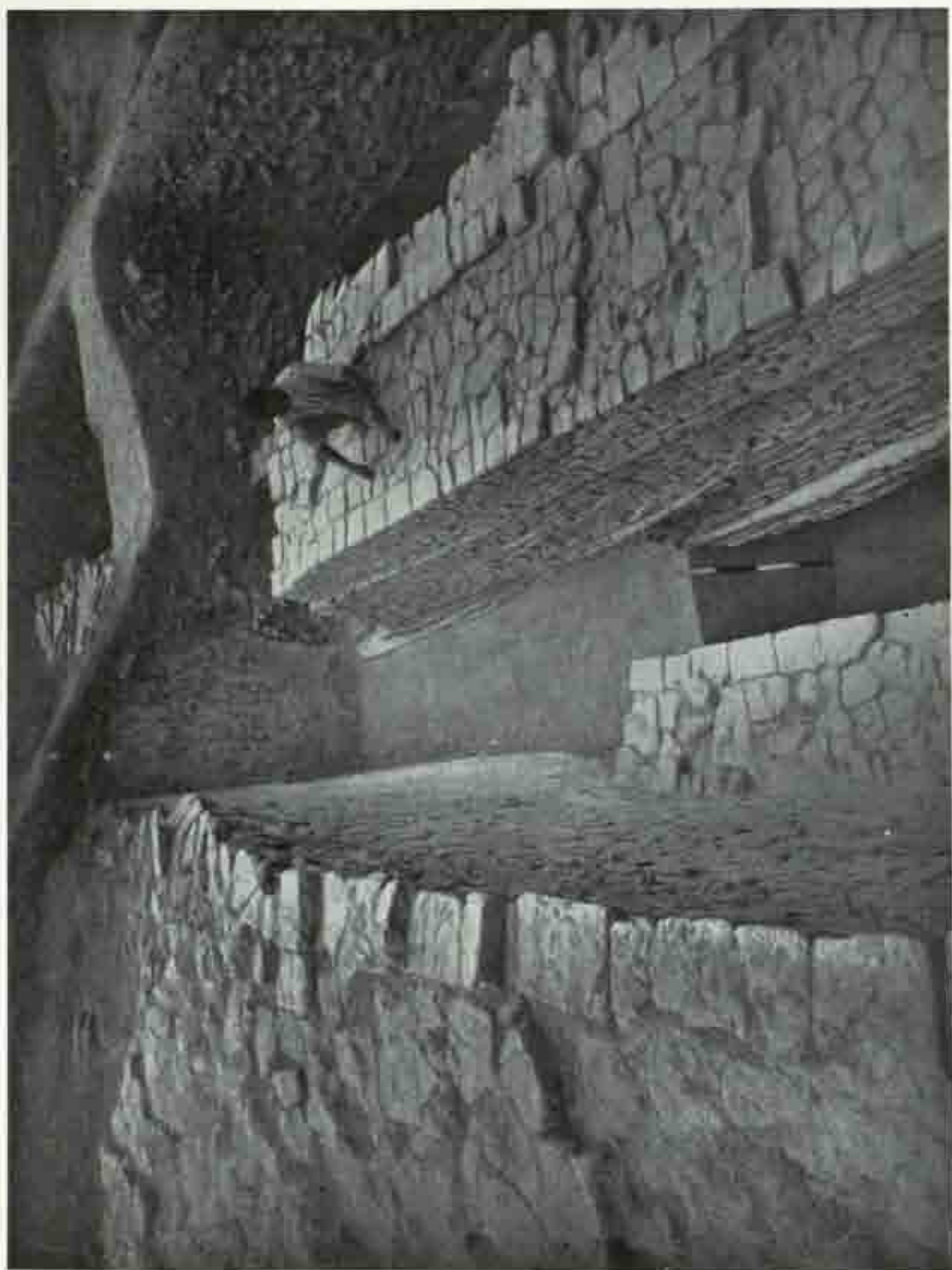
Kodan : well, curved south facade. See p. 163



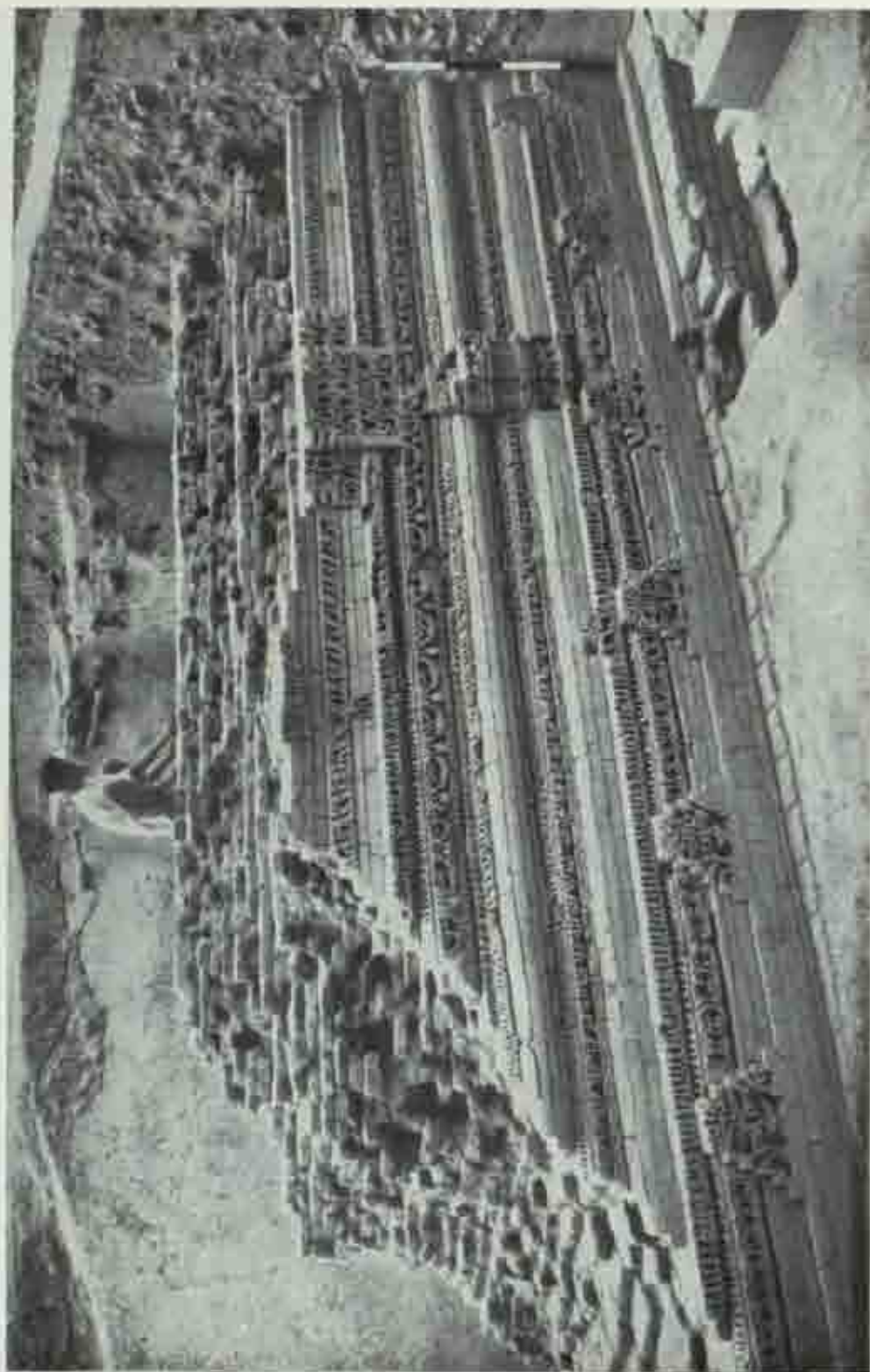
Kodan: Temple I under excavation. See p. 164



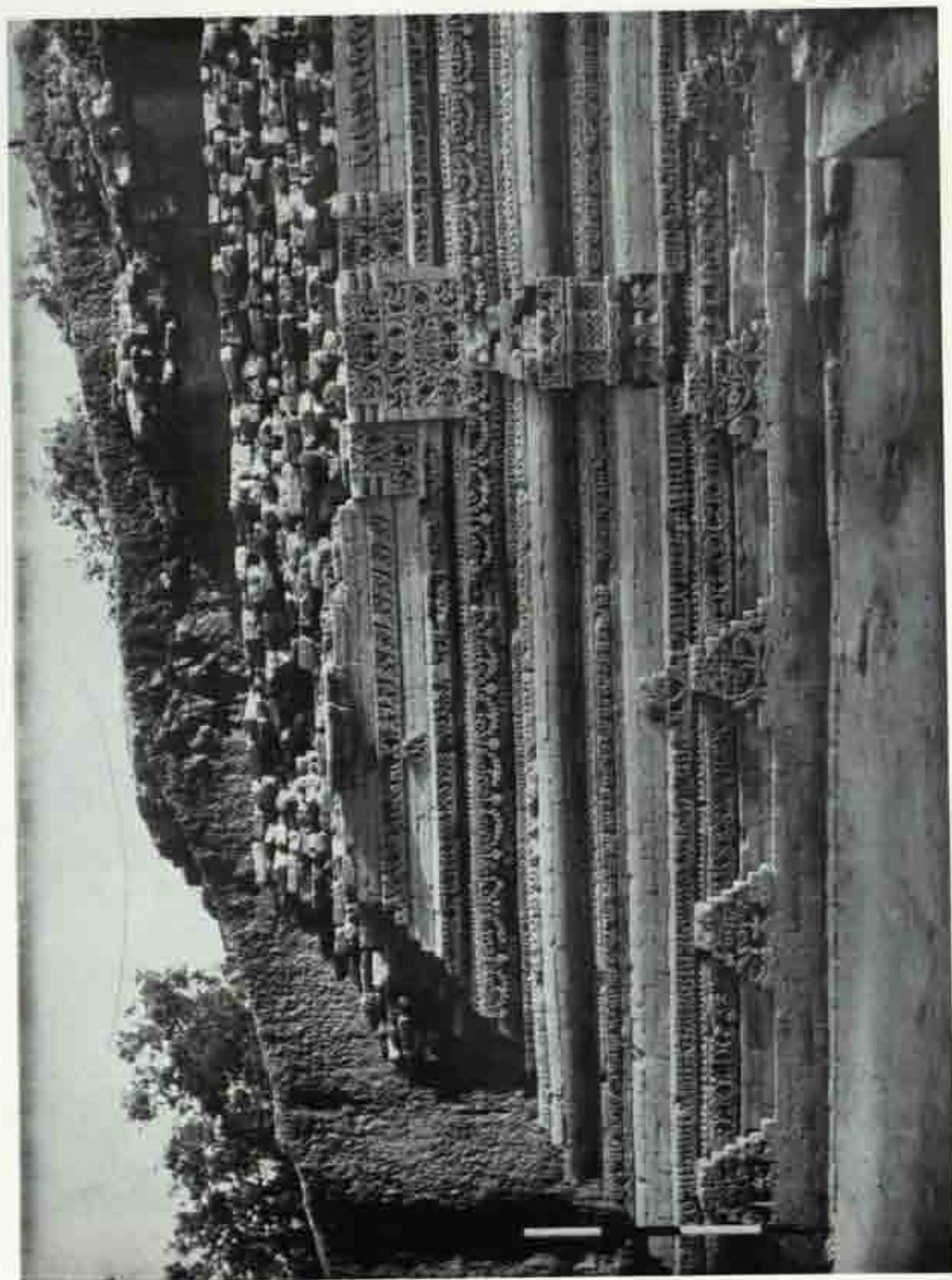
Kódan; Temple 1, north side. See p. 164



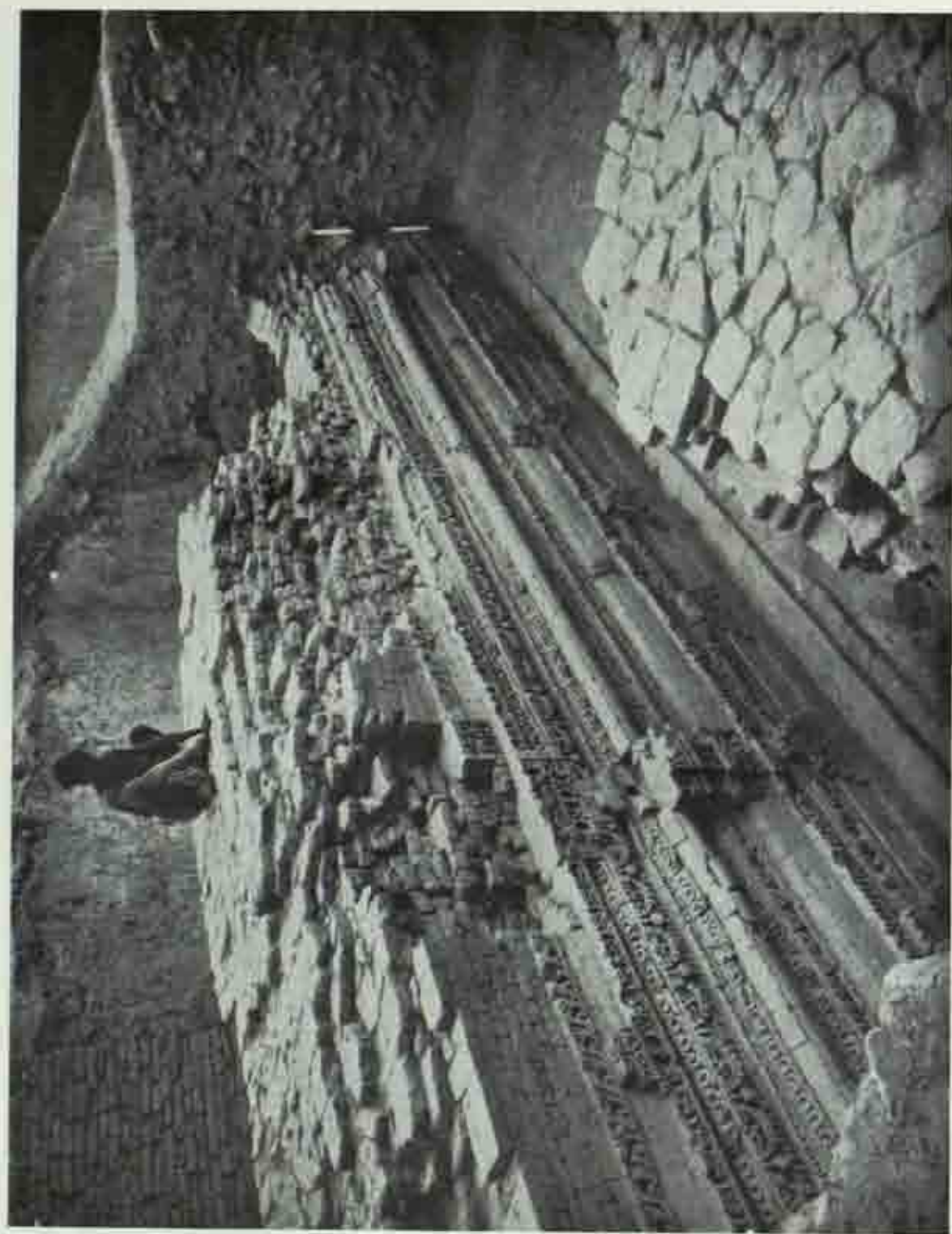
Kodan : Temple 1, intervening space between the brick wall of the platform and the porch of Period I. See p. 165.



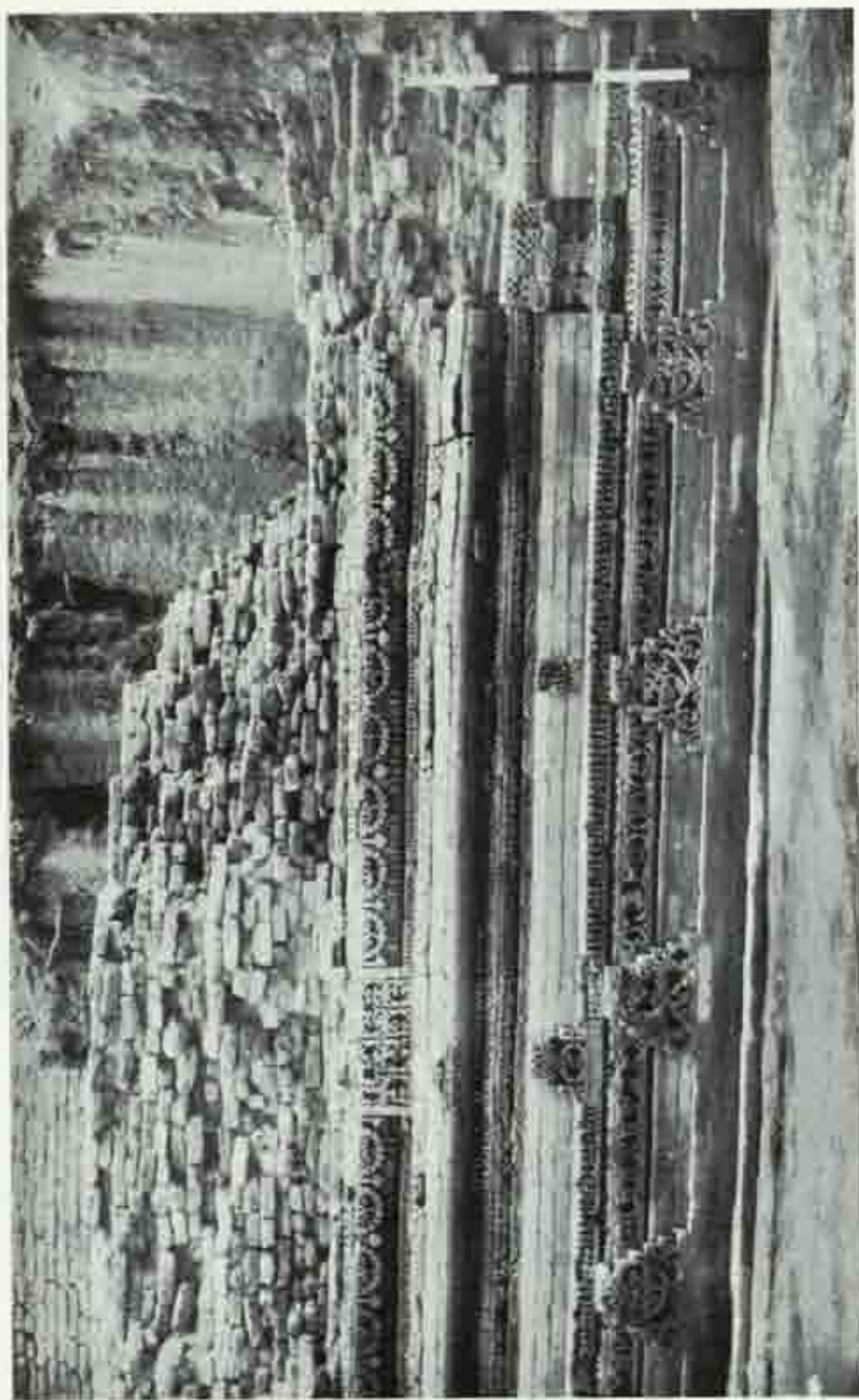
Kodan. Temple 1, part of the ornate north facade of the platform. See pp. 165 and 166.



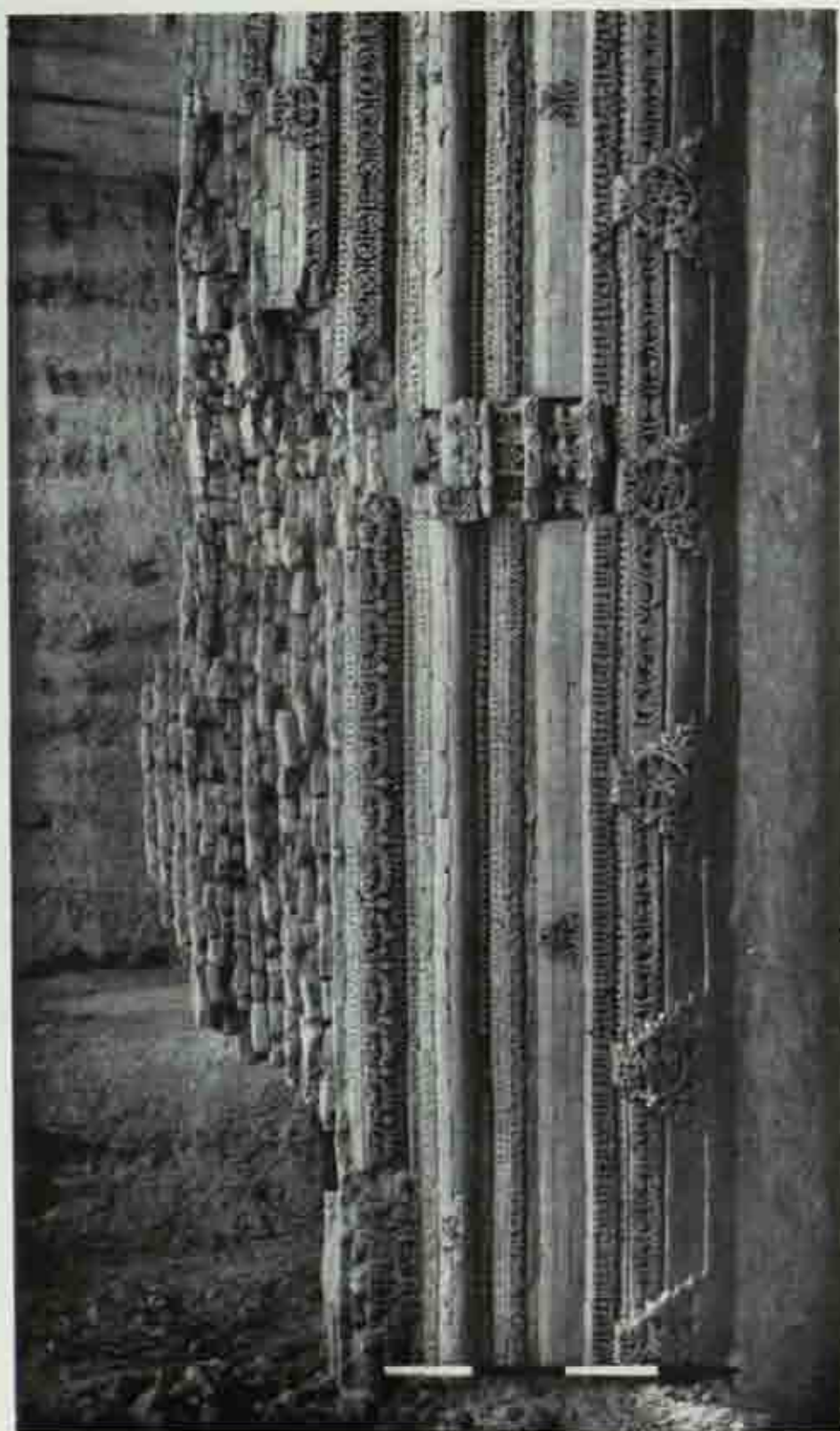
Kodan; Temple I, part of the ornate north facade of the platform. See pp. 165 and 166



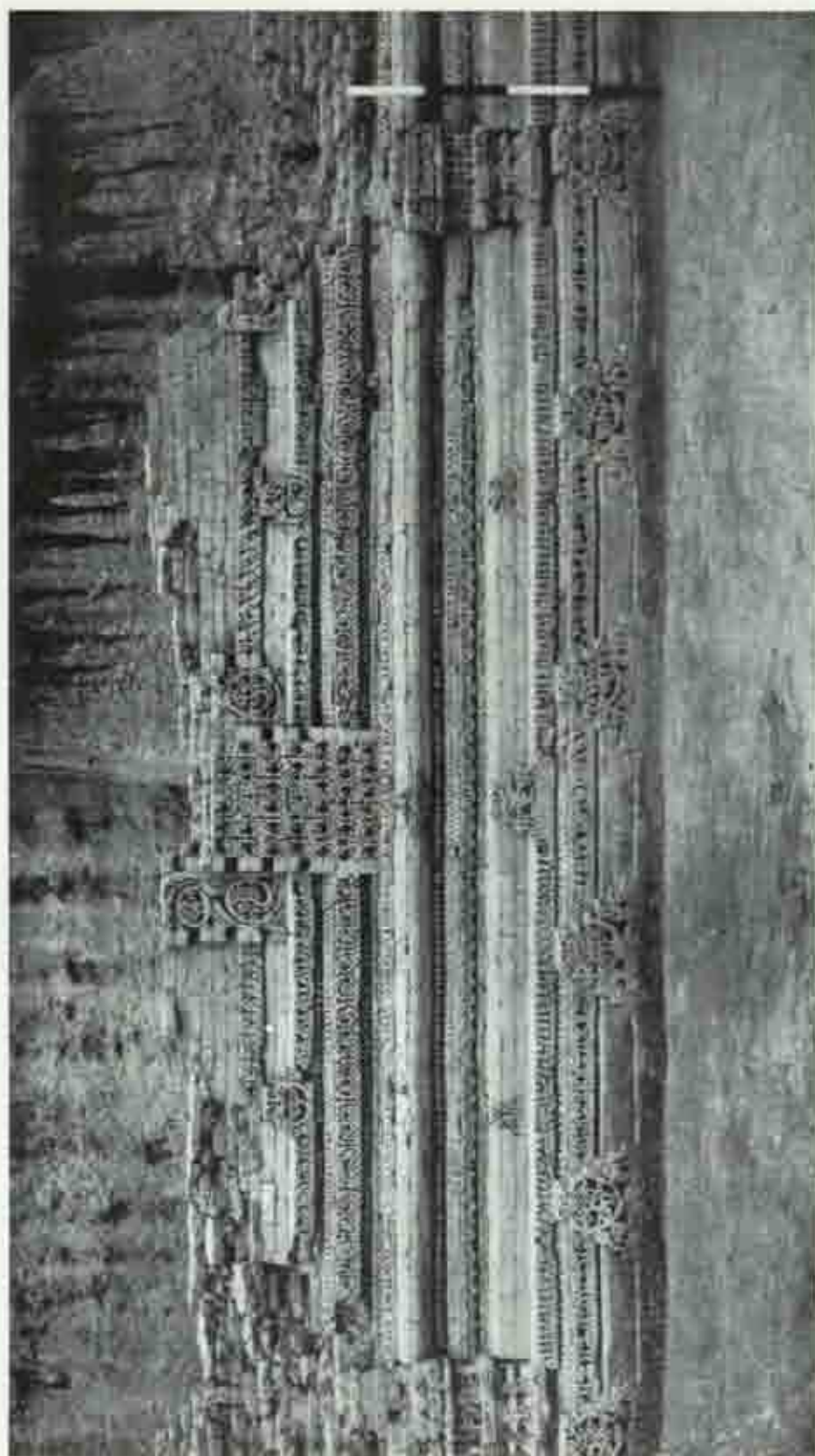
Kodan; Temple 1, part of the ornate north facade of the platform. See pp. 165 and 166



Kodun; Temple 1, part of the ornate north facade of the platform. See pp. 165 and 166



Kodan: Temple 1, part of the ornate north facade of the platform. See pp. 165 and 166



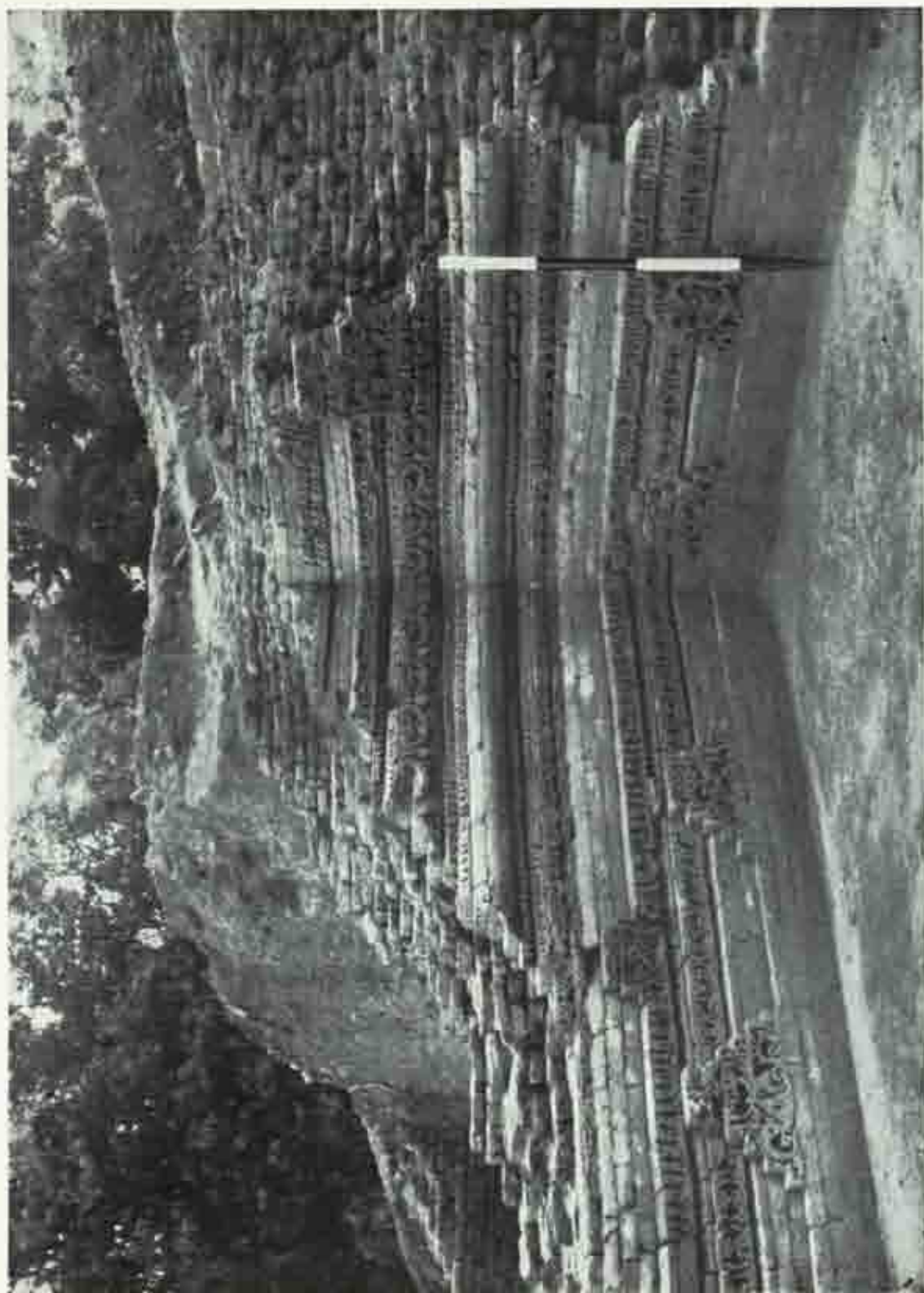
Kodan : Temple 1, part of the ornate north facade of the platform. See pp. 165 and 166



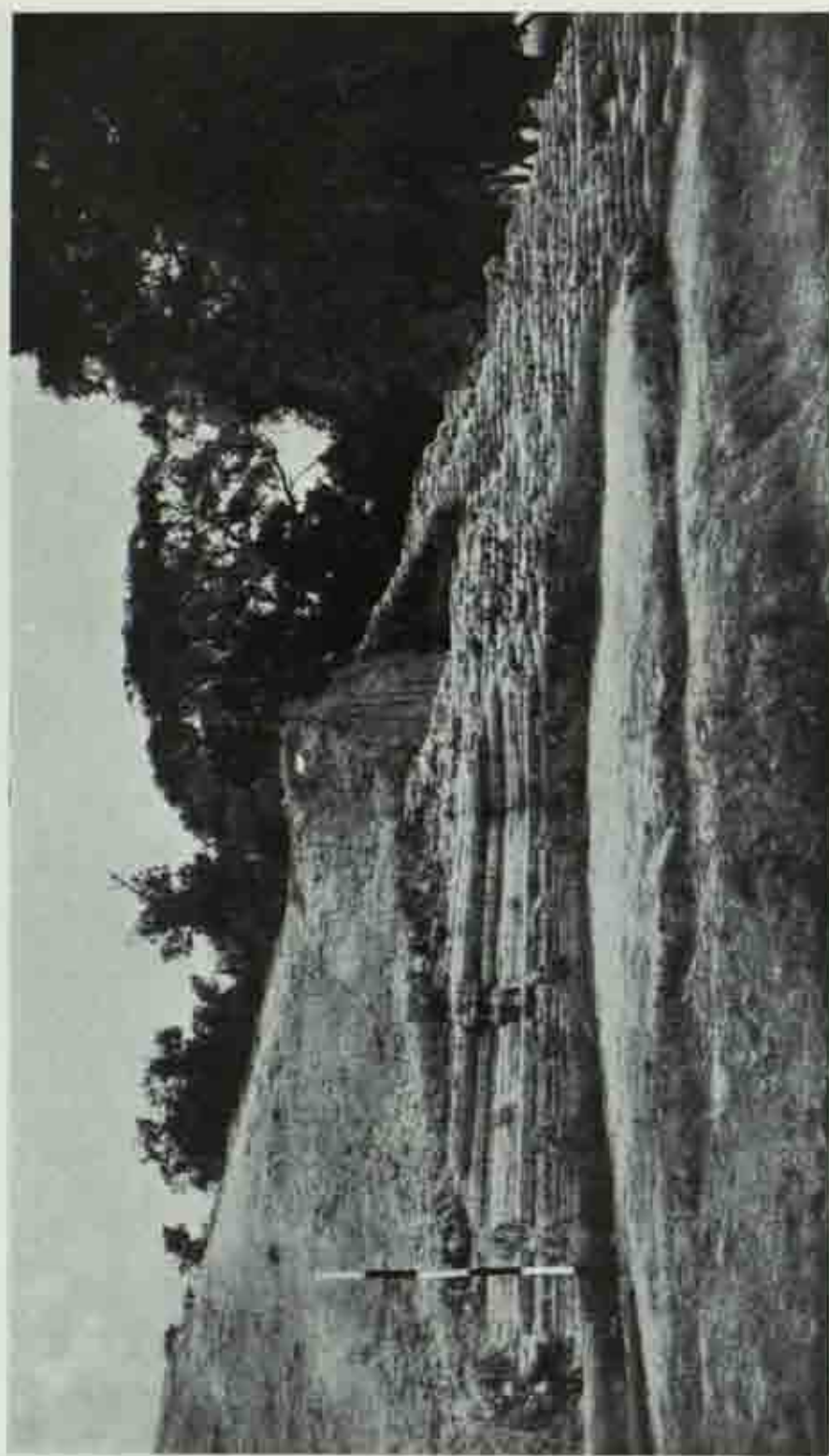
A. Kodan: Temple I, details of decoration on the facade of the platform. See pp. 165 and 166



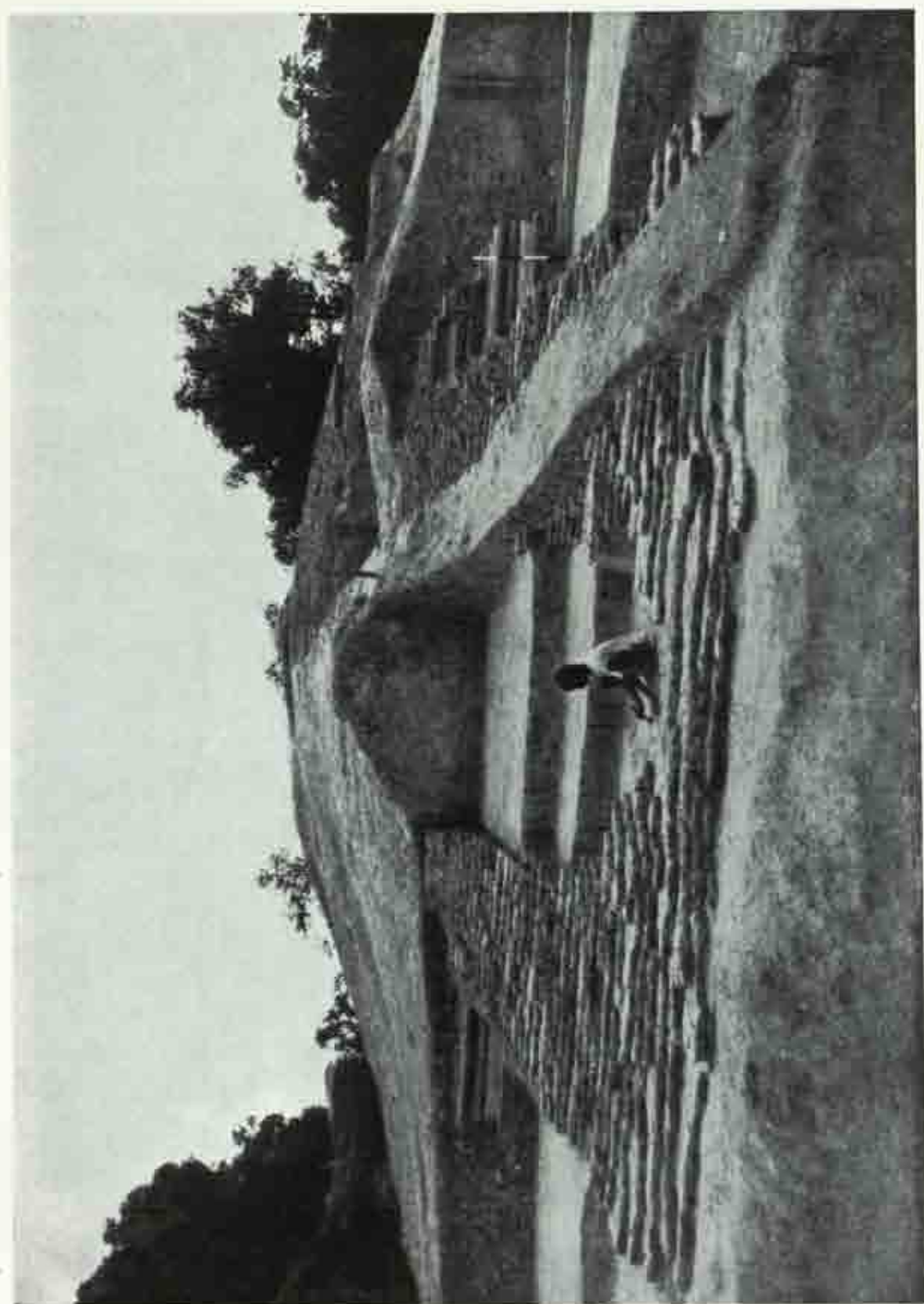
B. Kodan: Temple I, details of decoration on the facade of the platform. See pp. 165 and 166



Kodan: Temple 1, north side of the staircase and the adjoining east side of the platform. See pp. 165 and 166



Kodan: Temple I, south side of the staircase and the adjoining east side of the platform. See pp. 165 and 166.



Kodan: Temple 1, front view of the ruined staircase. See p. 166



Kodan: Temple I, basement of the sanctuary of Period I, over which is seen the lower part of the sanctuary of Period II. See p. 167



A. Kodan; Temple I, portion of the east and north-eastern faces of the sanctuary of Period I, behind which is seen the sanctuary of Period II. See pp. 167 and 168



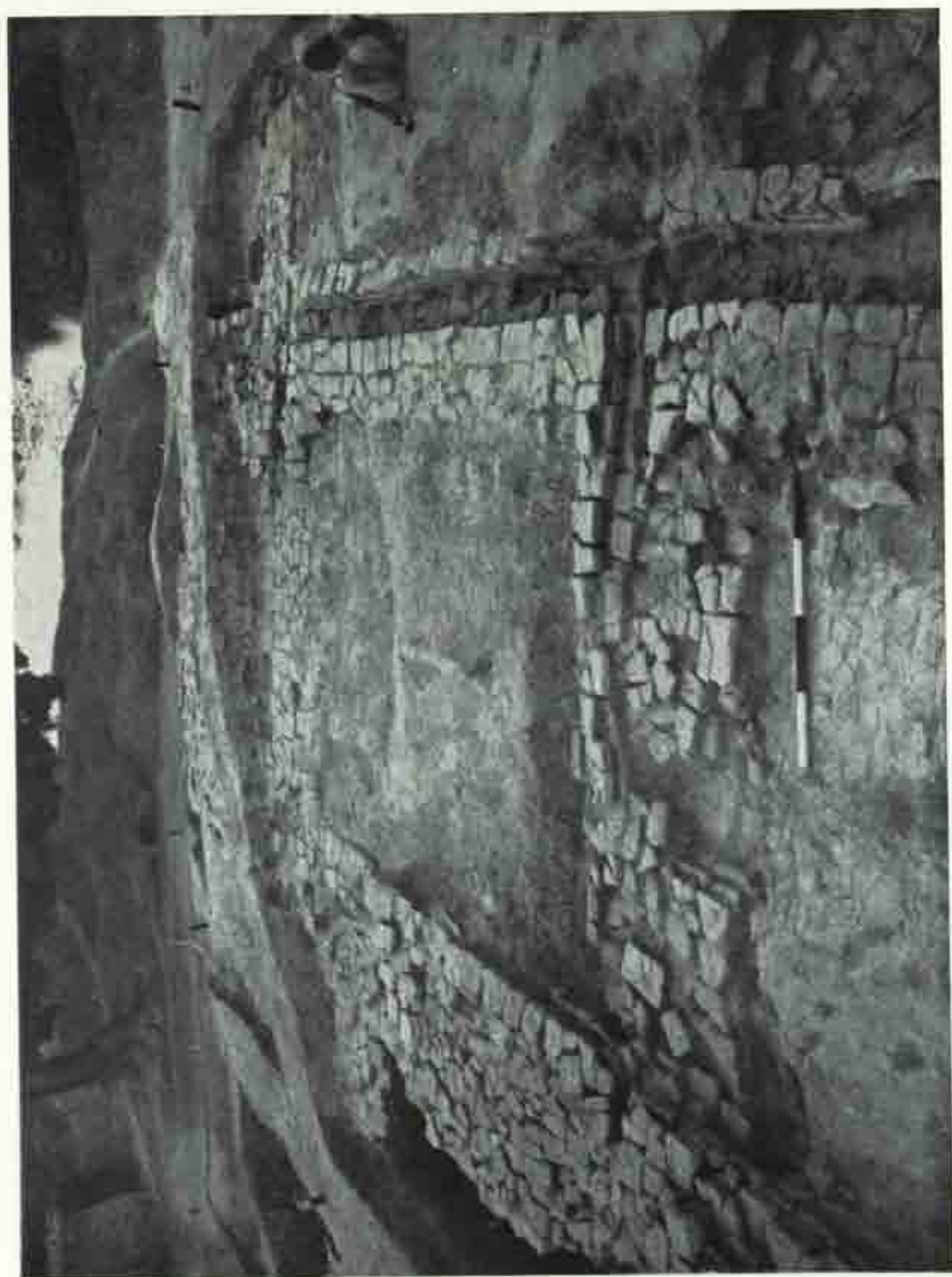
B. Kodan; Temple I, north-eastern face of the sanctuary of Period I, behind which is seen the sanctuary of Period II. See pp. 167 and 168



A. Kodan: Temple 1, part of the west wall of the porch of Period I adjoining the sanctuary of Period II. See pp. 168 and 169



B. Kodan: Temple 1, part of the north wall of the porch of Period I. See p. 169

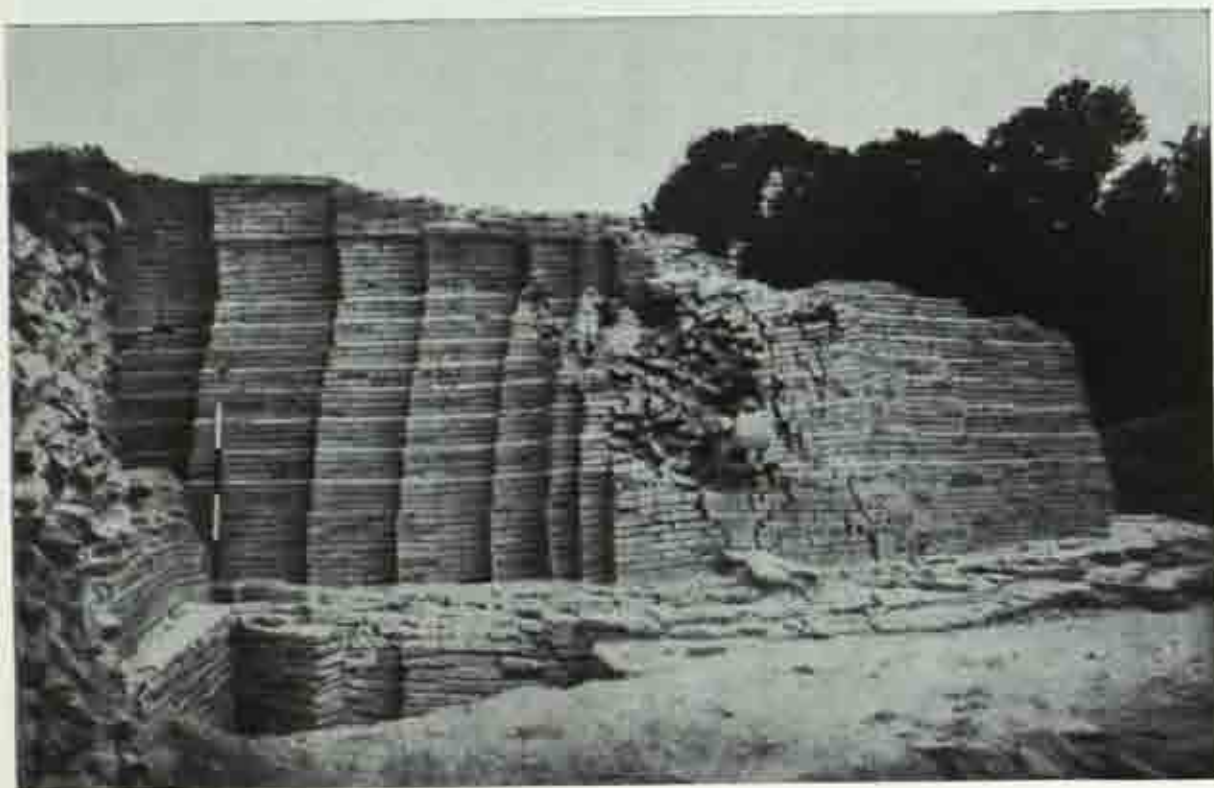


Kodun : Temple 1, chases in the interior walls of the porch of Period I. See p. 169.

PLATE LXXX



A. Kodan: Temple 1, east flank of the north side of the sanctuary of Period II. See pp. 170 and 171



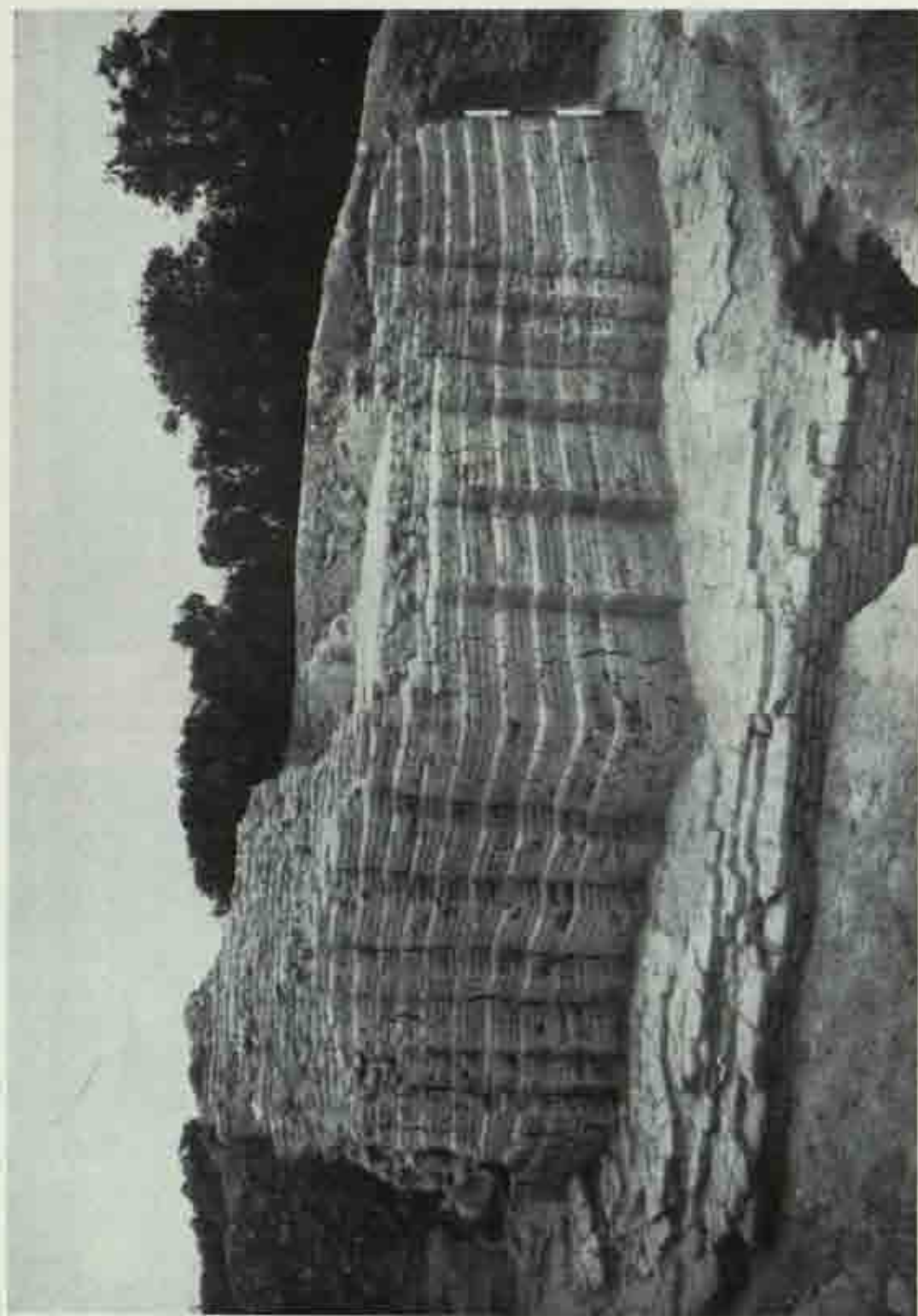
B. Kodan: Temple 1, north side of the sanctuary of Period II. See pp. 170 and 171



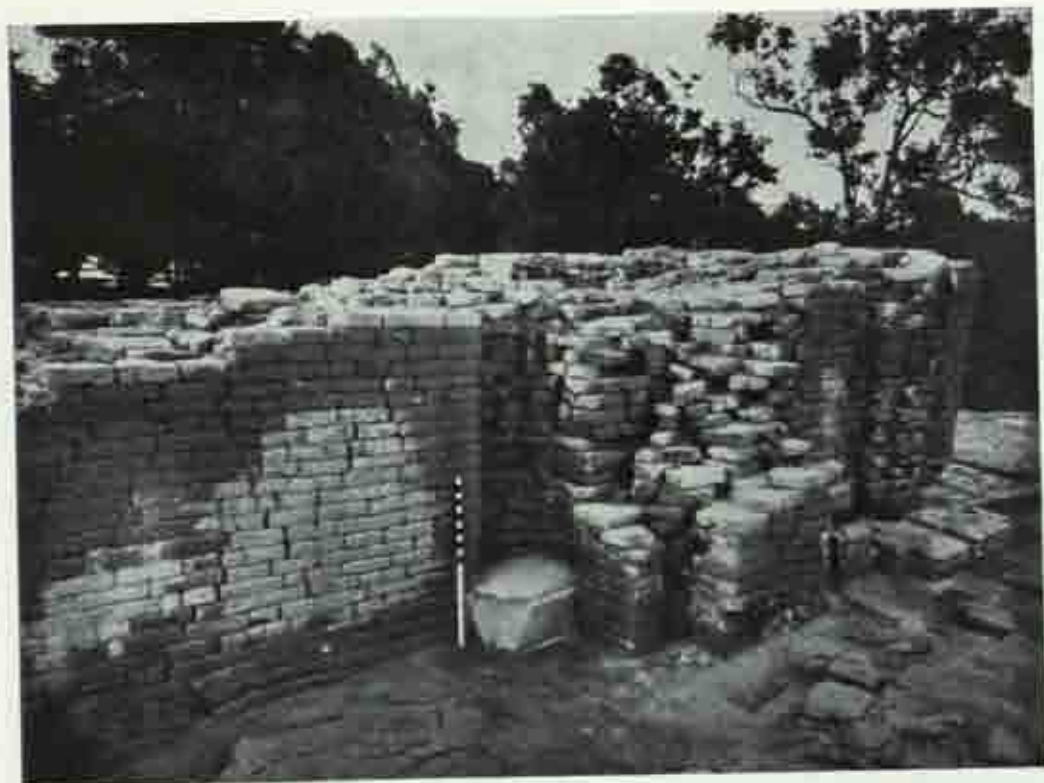
A. Kodan: Temple I, east flank of the north side of the sanctuary of Period II, below which is seen a part of the north-eastern face of the sanctuary of Period I. See pp. 167, 170 and 171.



B. Kodan: Temple I, west side of the sanctuary of Period II. See p. 170



Kodan: Temple 1, portions of the north and west sides of the sanctuary of Period II. See pp. 170 and 171



A. Kodan: Temple I, base of the pilaster at the north-eastern corner of the interior of the sanctuary of Period II. See pp. 170 and 171



B. Kodan: Temple I, east face of the sanctuary of Period II with stepped entrance-passage. See pp. 170 and 171



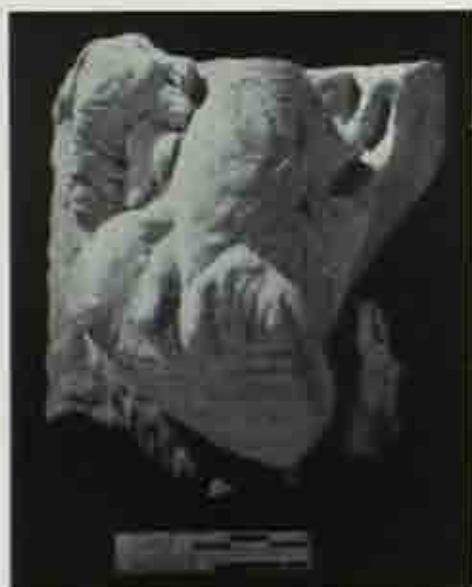
Kodan: Temple 1, interior of the sanctuary of Period II. See pp. 170 and 171



A. Kodan: Temple I, moulded stones flanking the entrance-passage of the sanctuary of Period II. See pp. 170 and 171



B. Kodan: Temple I, section across the entrance-passage of the sanctuary



A. Kodan: Temple 1, fragment of an image of Kārttikeya. See pp. 164, 171 and 172



B. Kodan : Temple 1, chases in the entrance-passage of the sanctuary of Period II. See p. 171



C. Kodan: fragments of an image of Mahishāsūramardīnī. See pp. 159 and 164



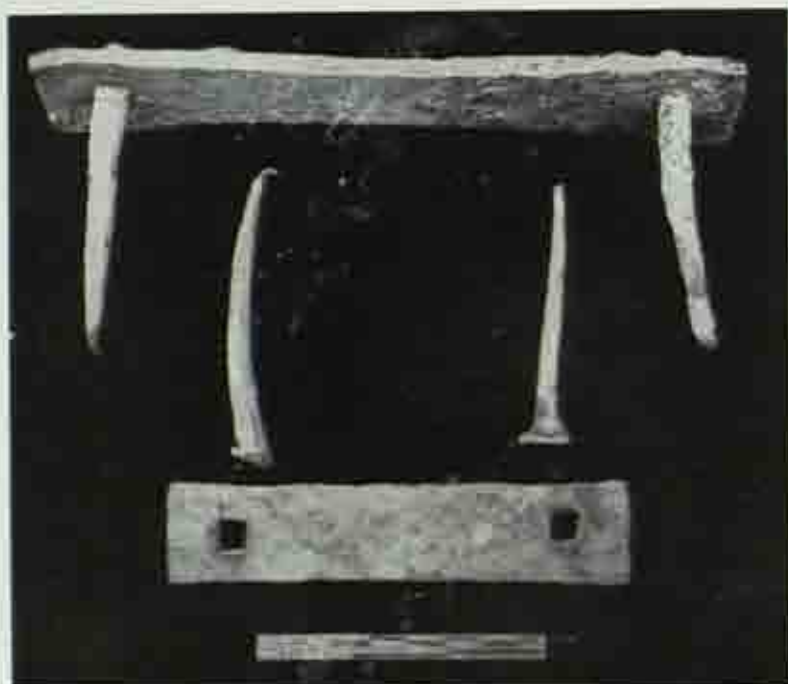
A. Kodan: Temple I, fragment of a sculpture. See p. 166



B. Kodan: Temple I, gargoyle shaped like the head of a *makara*. See p. 170



A. Kodan: Temple 1, moulded and carved stones. See p. 170



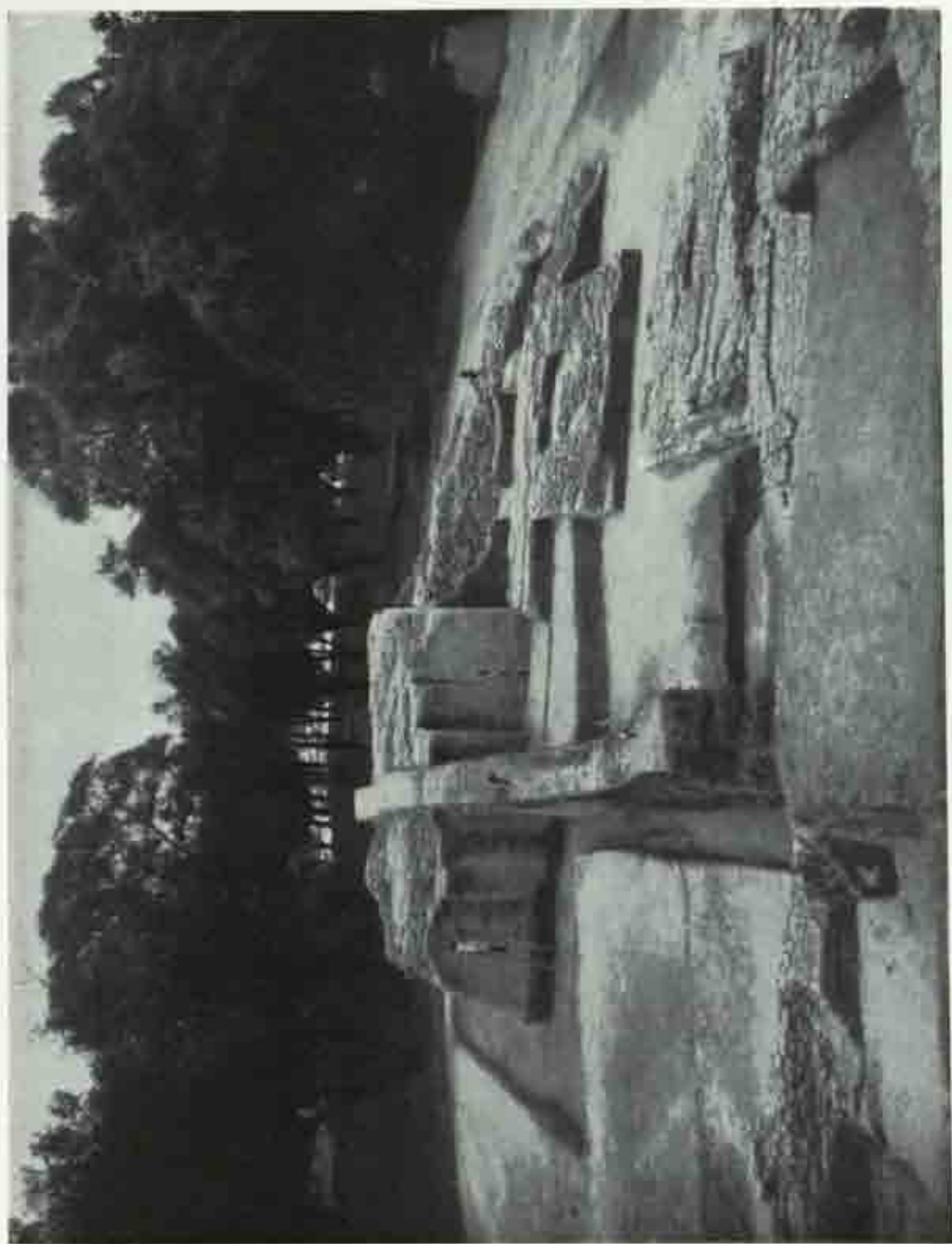
B. Kodan: Temple 2, iron clamps. See p. 173



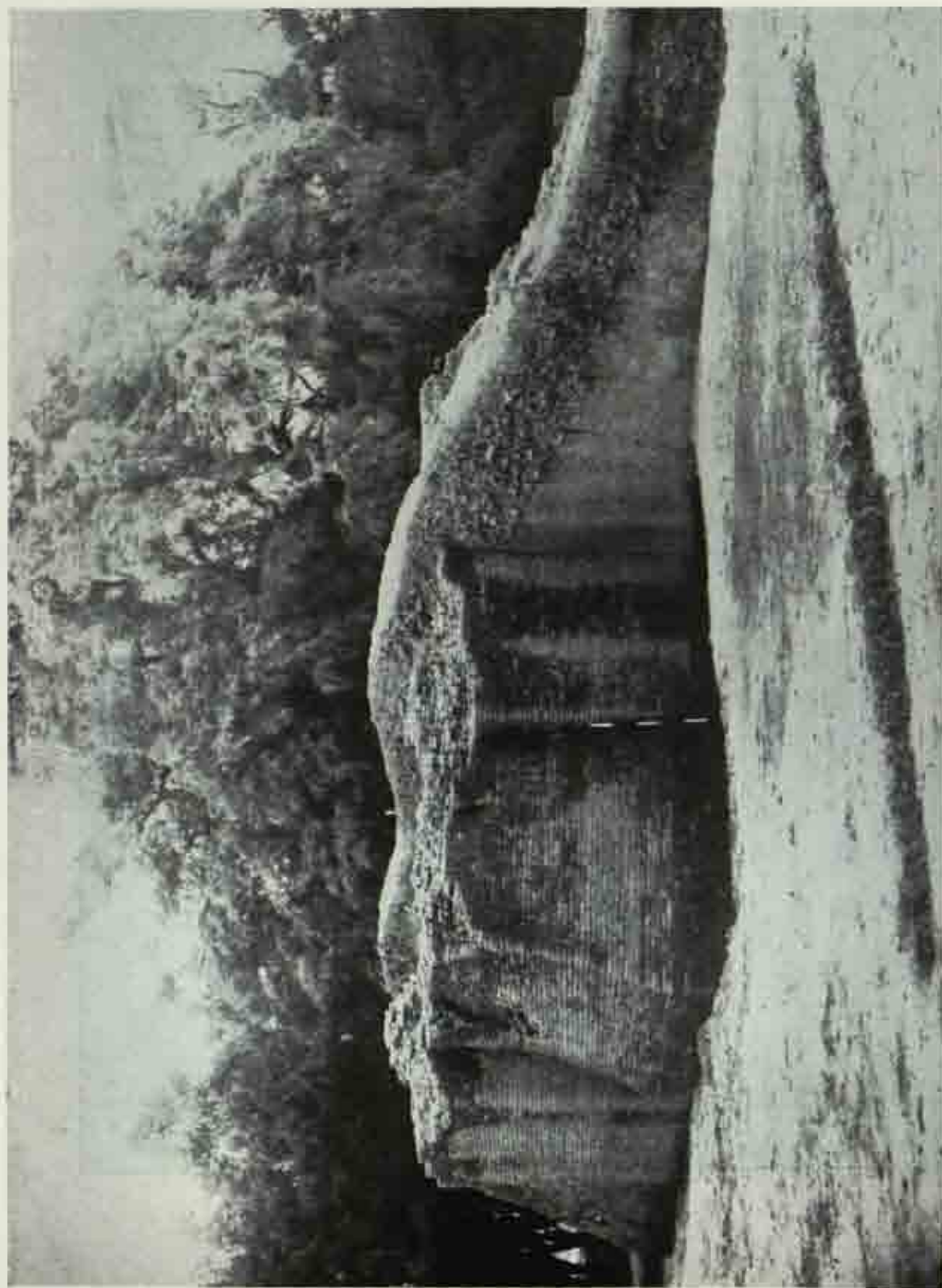
Kodan: Temple 2 under excavation. See p. 172



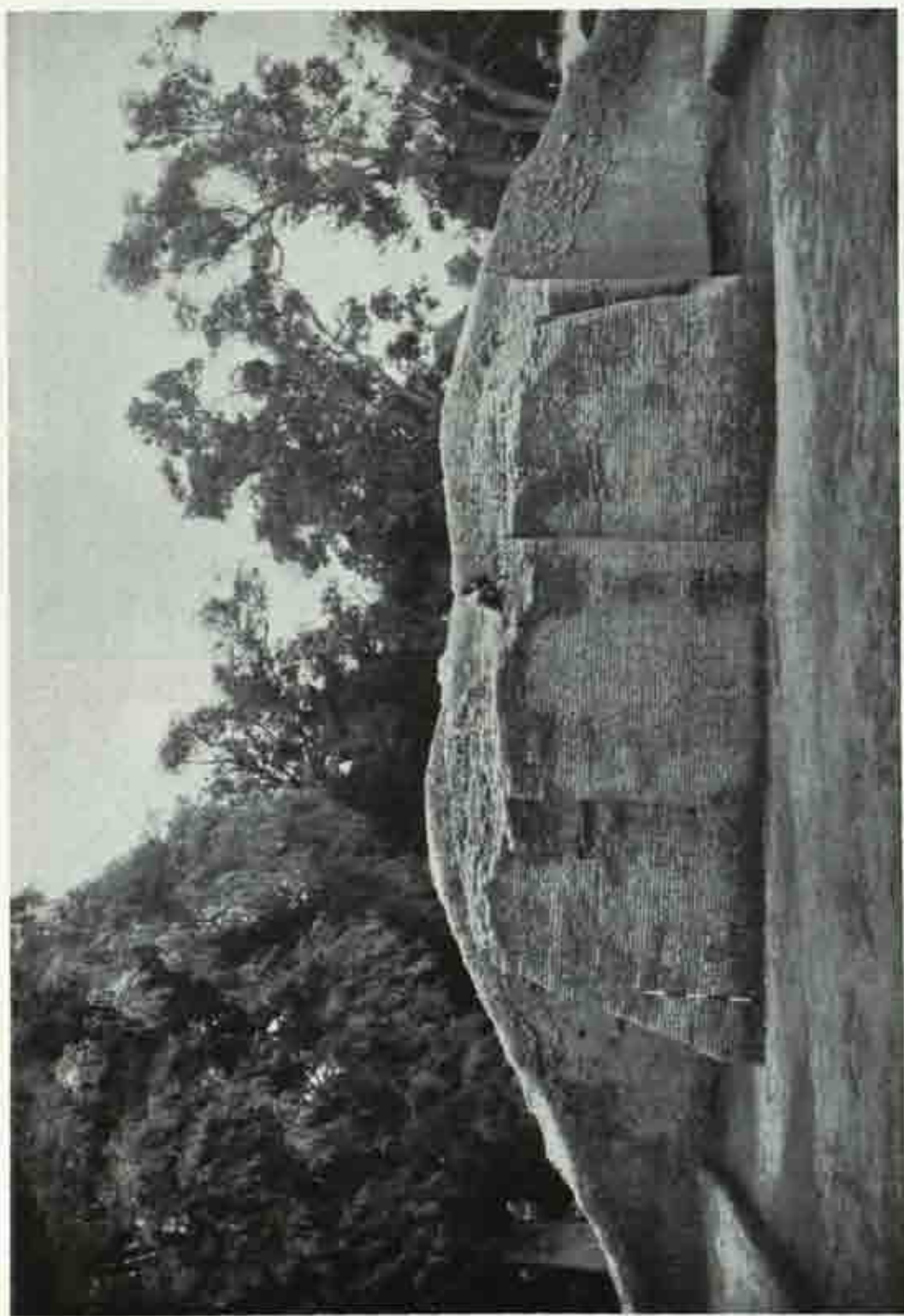
Kodan: Temples 1 and 2 and well, general view. See p. 172



Kodan: Temple 2, south side. See p. 172

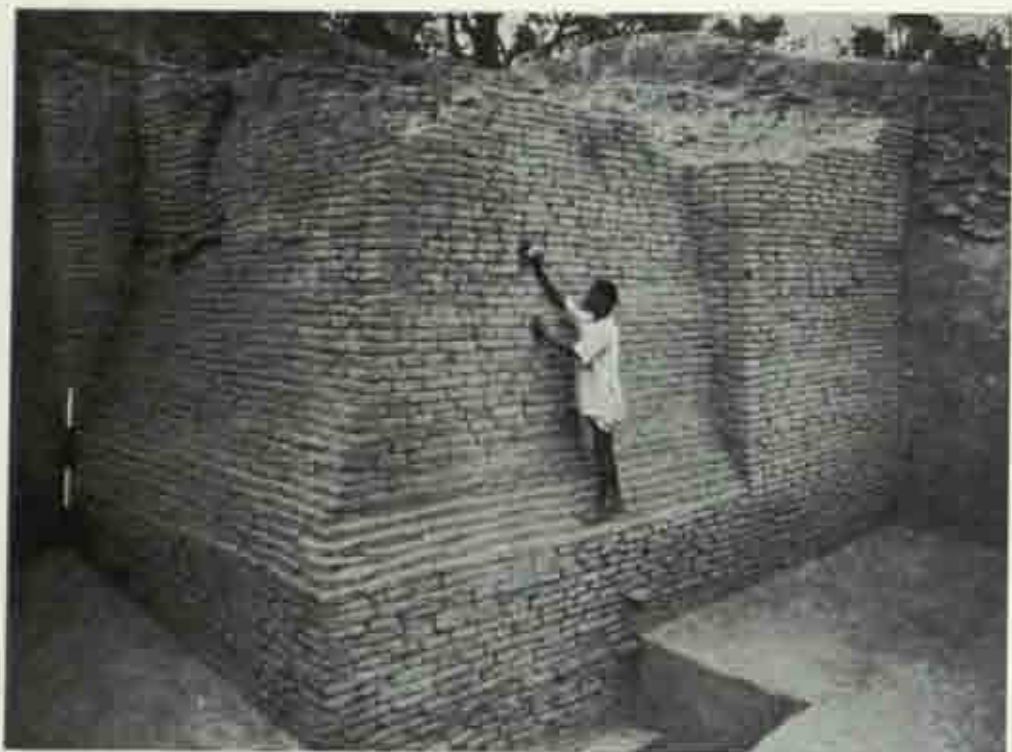


Kodan: Temple 2, portions of south and west sides of the basement of the sanctuary. See p. 172

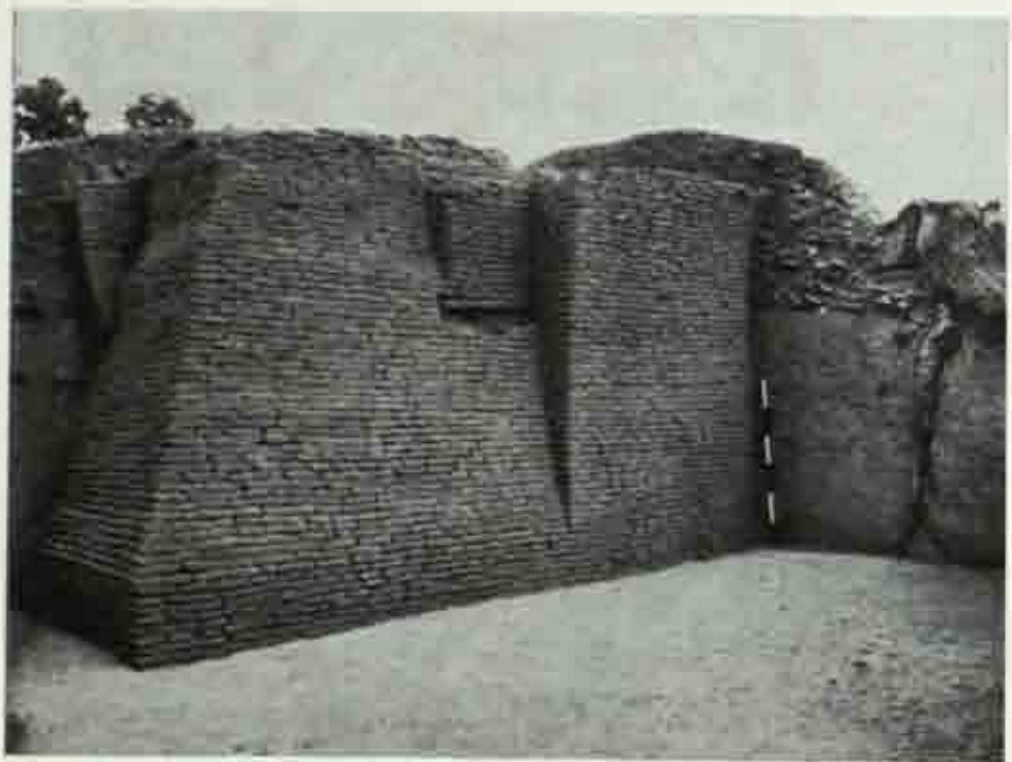


Kodan: Temple 2, west face of the basement of the sanctuary. See p. 172

PLATE XCIV



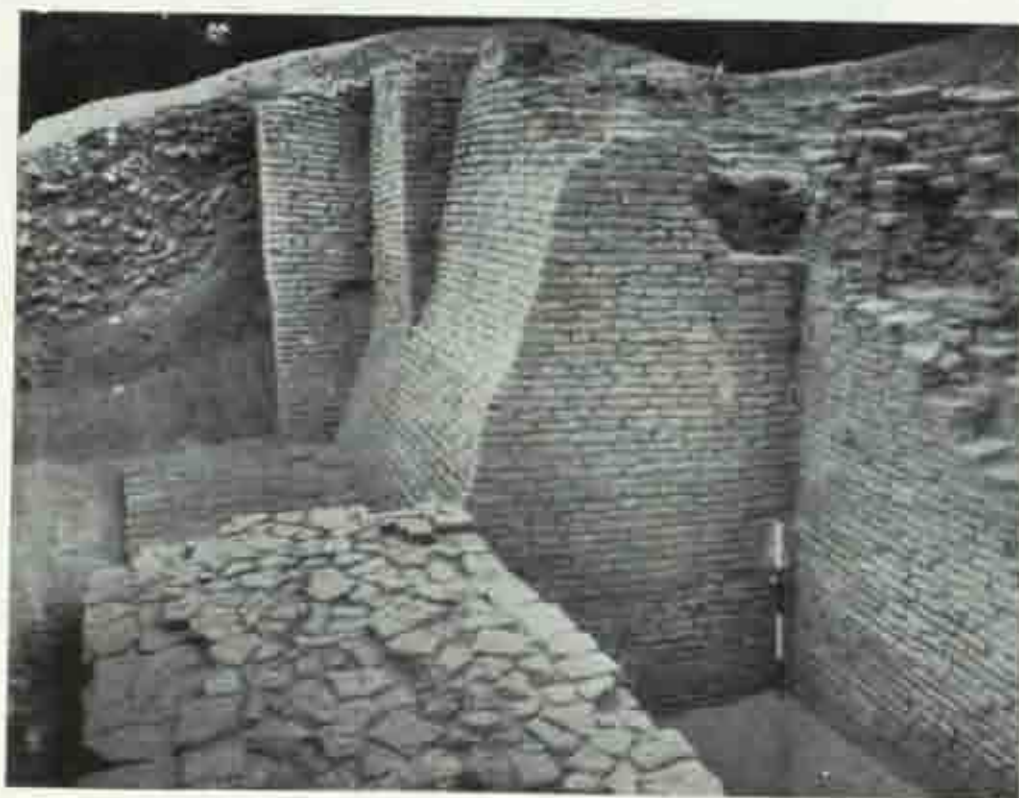
A. Kodan: Temple 2, south-western corner of the basement of the sanctuary. See p. 172



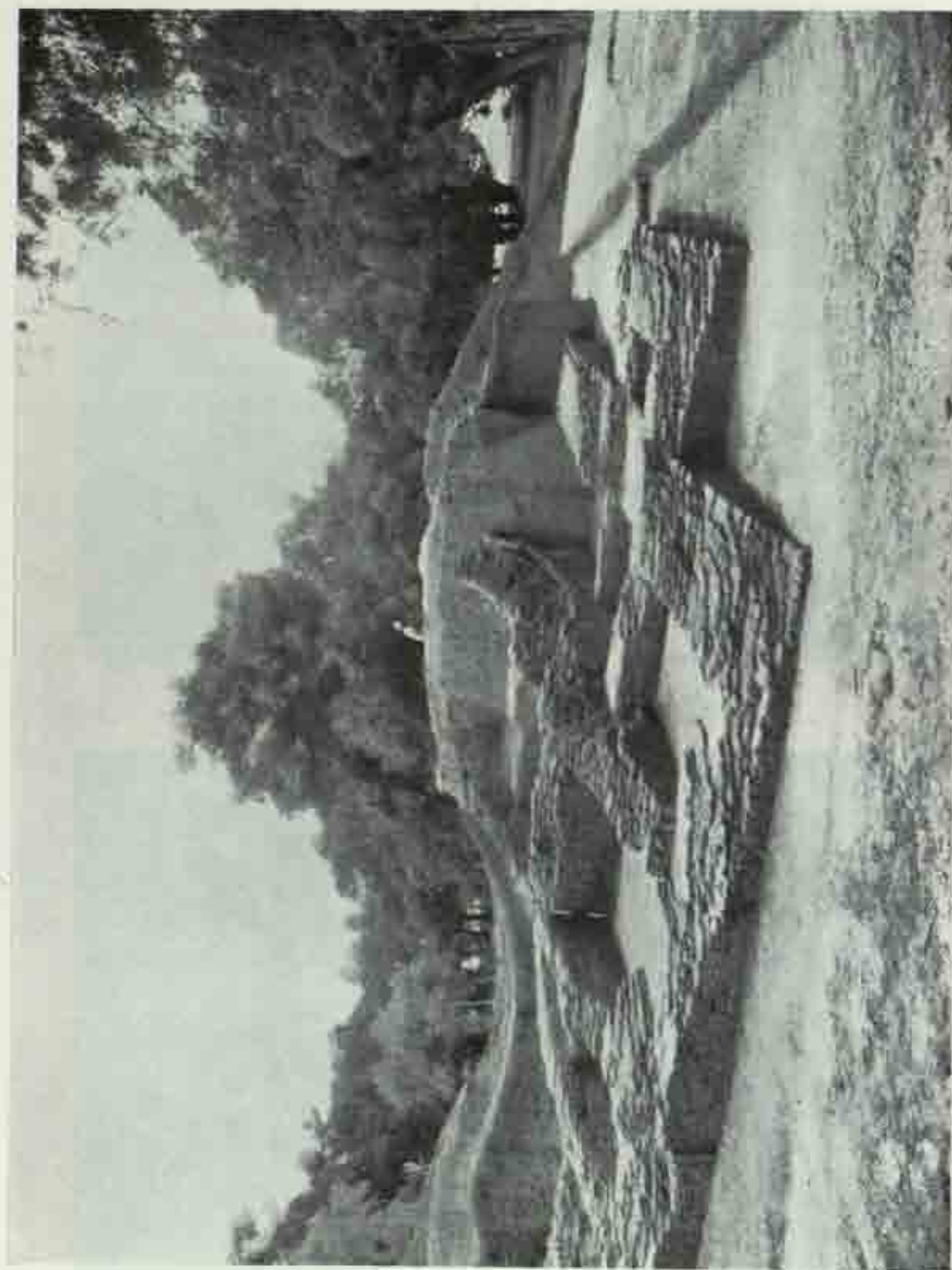
B. Kodan: Temple 2, north-western corner of the basement of the sanctuary. See p. 172



A. Kodan; Temple 2, north-eastern corner of the basement of the sanctuary and the foundation-wall of the adjoining cell. See p. 172



B. Kodan; Temple 2, south-eastern corner of the basement of the sanctuary and the foundation-wall of the adjoining cell. See p. 172



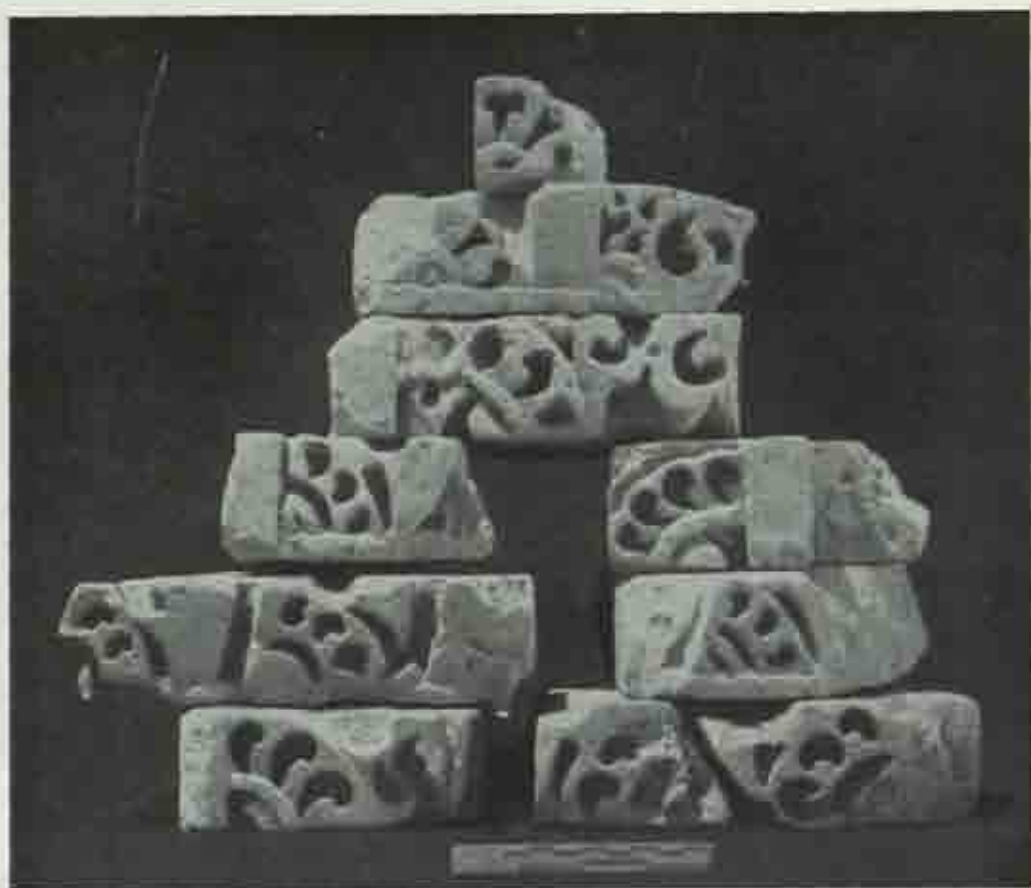
Kodan: Temple 2, east side. See p. 172



A. Kodan: Temple 2, part of the cell-foundation of the porch. See p. 172



B. Kodan: Temple 2, part of the cell-foundation of the porch. See p. 172



A



B

Kodan: Temple 2, carved bricks. See p. 173



A



B

Kodan: Temple 2, carved bricks. See p. 173



A

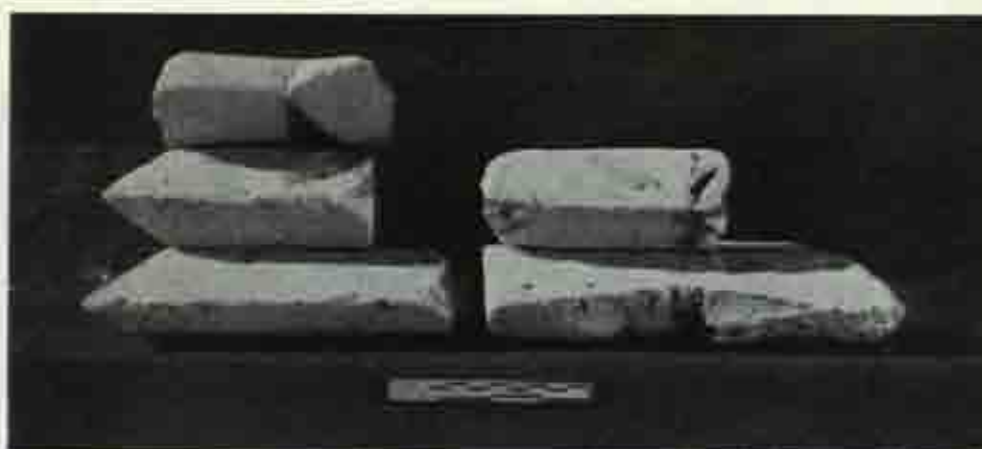


B

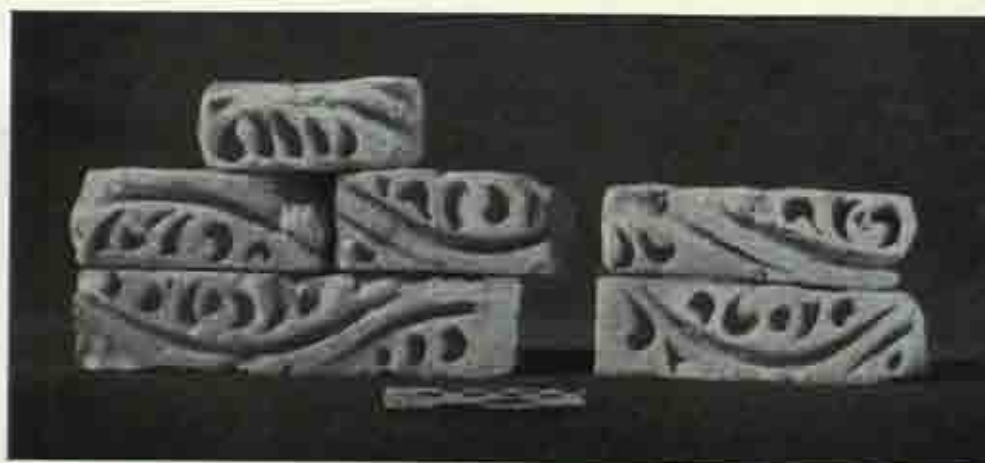
Kodan: Temple 2, carved bricks. See p. 173



A

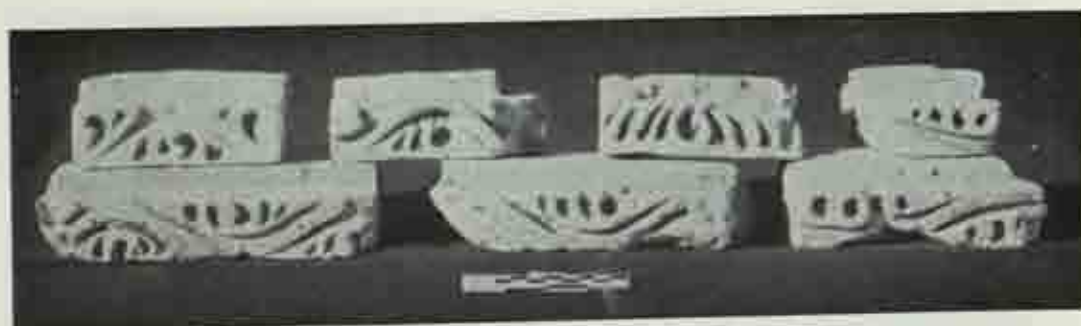


B



C

Kodan: Temple 2, carved bricks. See p. 173



A



B



C



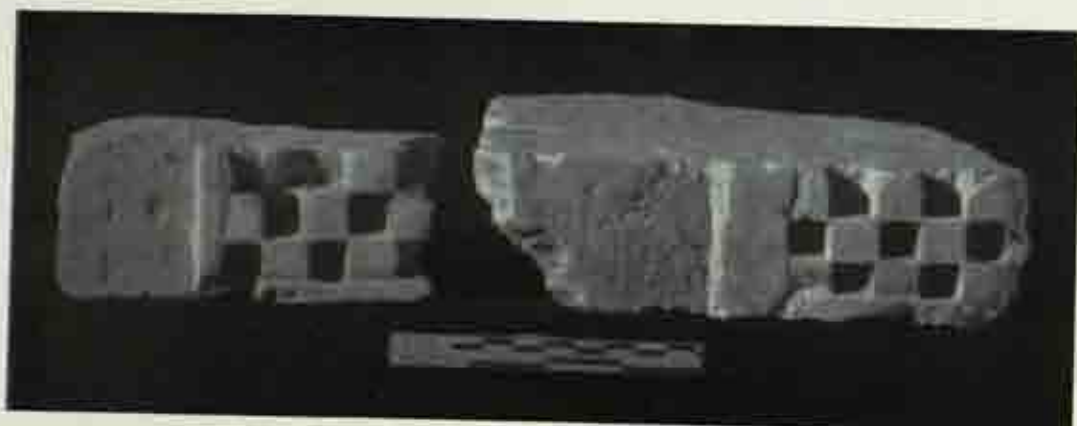
A



B



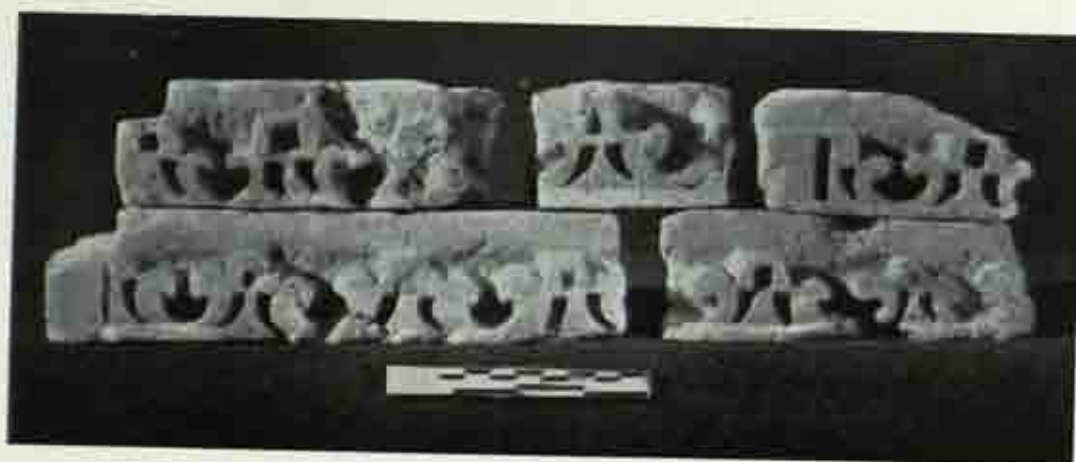
C



A.



B.



C.

Kodan: Temple 2; carved bricks. See p. 173



A

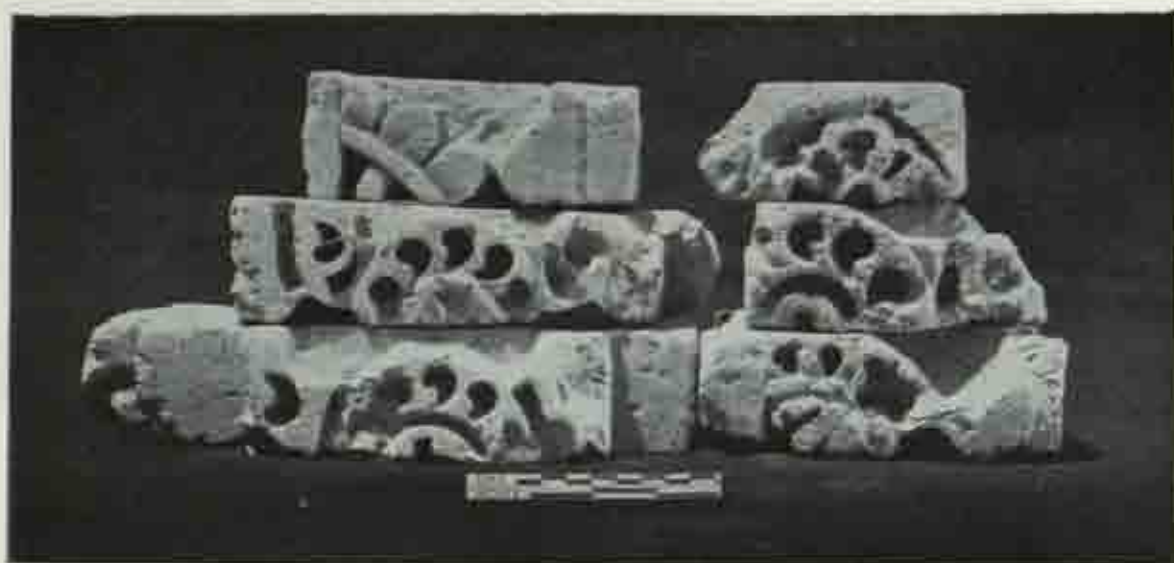


B



C

Kodan: Temple 2, carved bricks. See p. 173



A

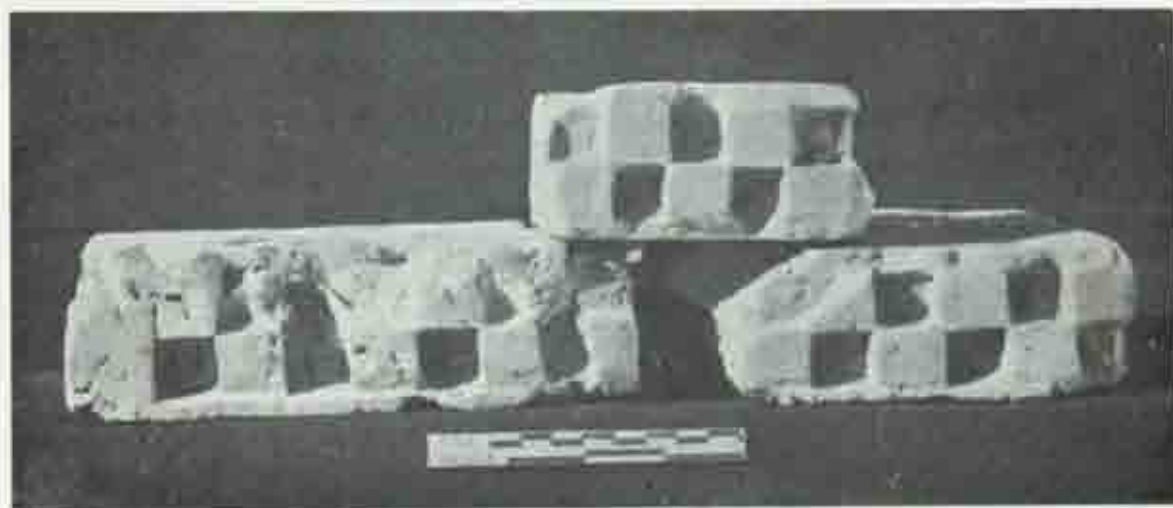


B

Kodan: Temple 2, carved bricks. See p. 173



A



B

Kodan: Temple 2, carved bricks. See p. 173



A



B

Kodan: Temple 2, carved bricks. See p. 173



A

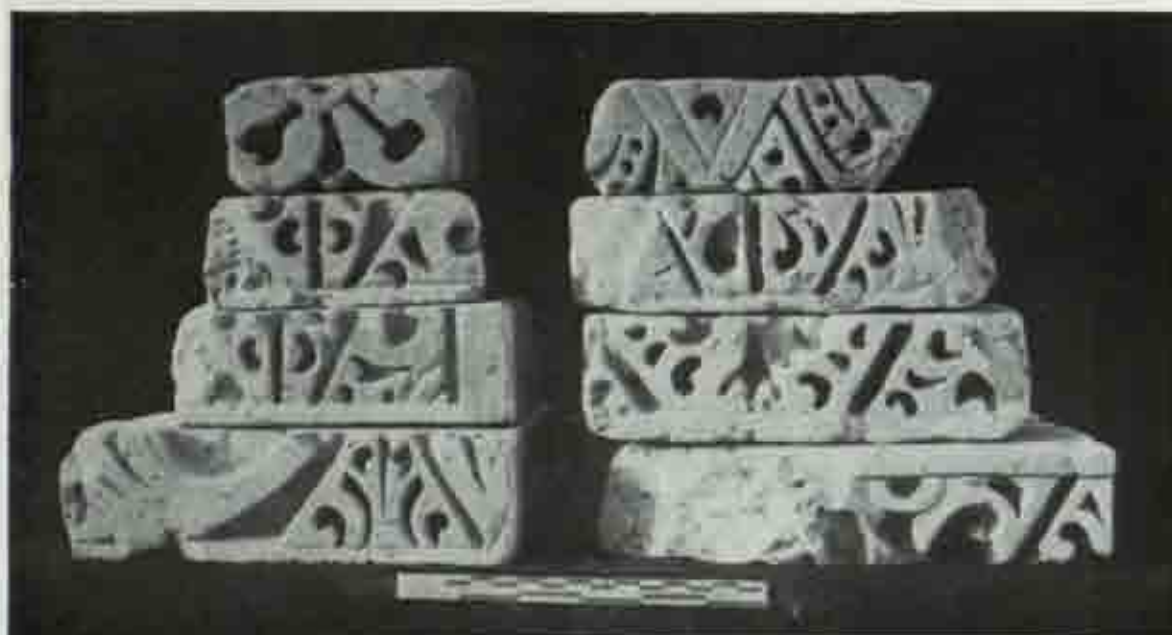


B

Kodan: Temple 2, carved bricks. See p. 173.



A

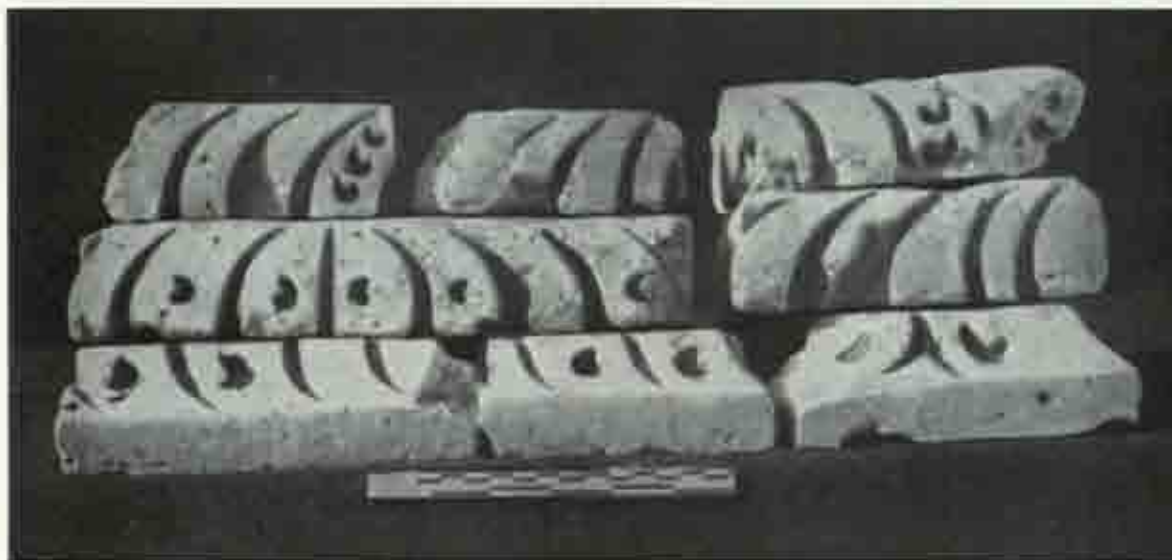


B

Kodan: Temple 2, carved bricks. See p. 173



A



B

Kodan: Temple 2, carved bricks. See p. 173



A



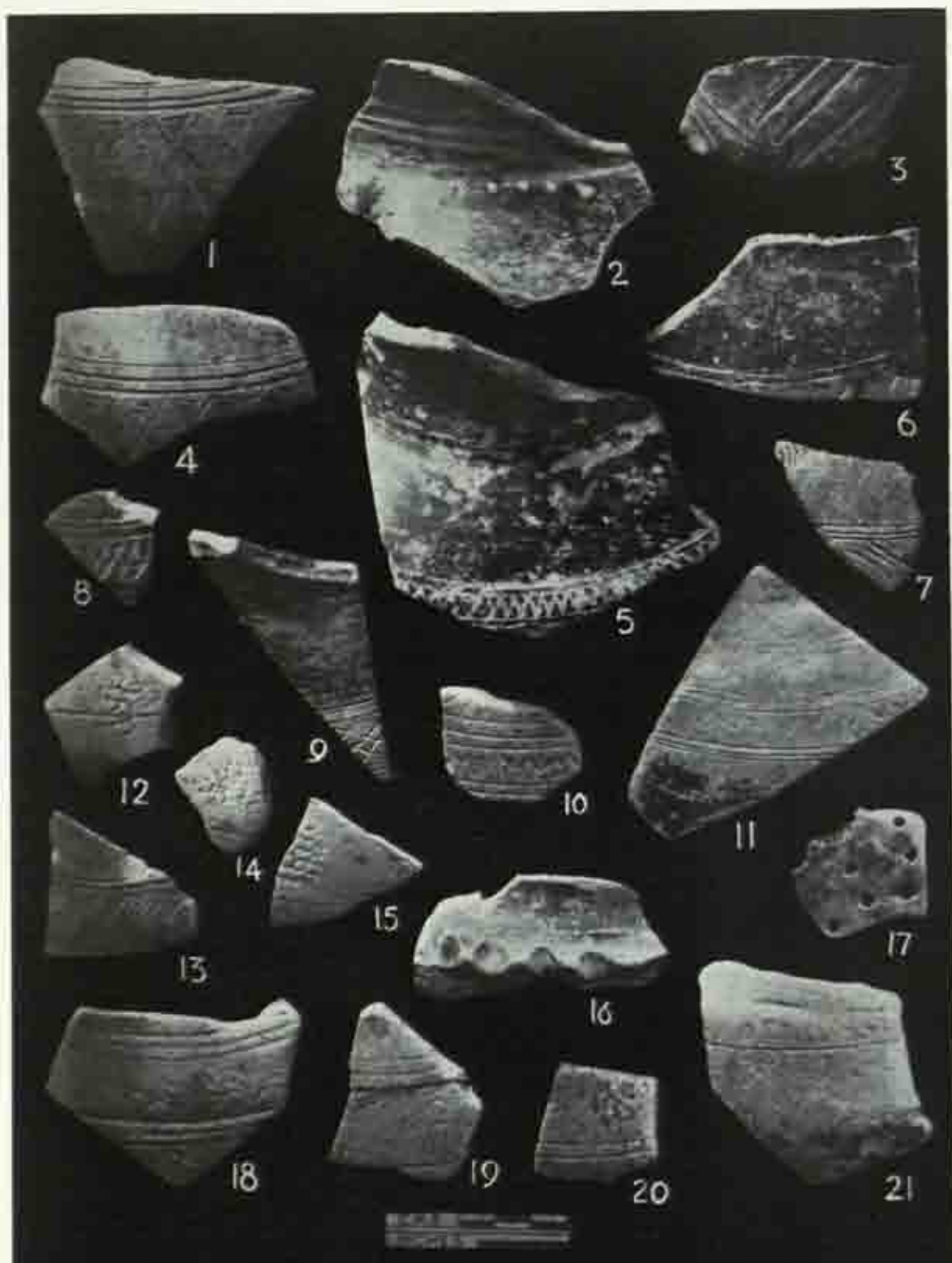
B



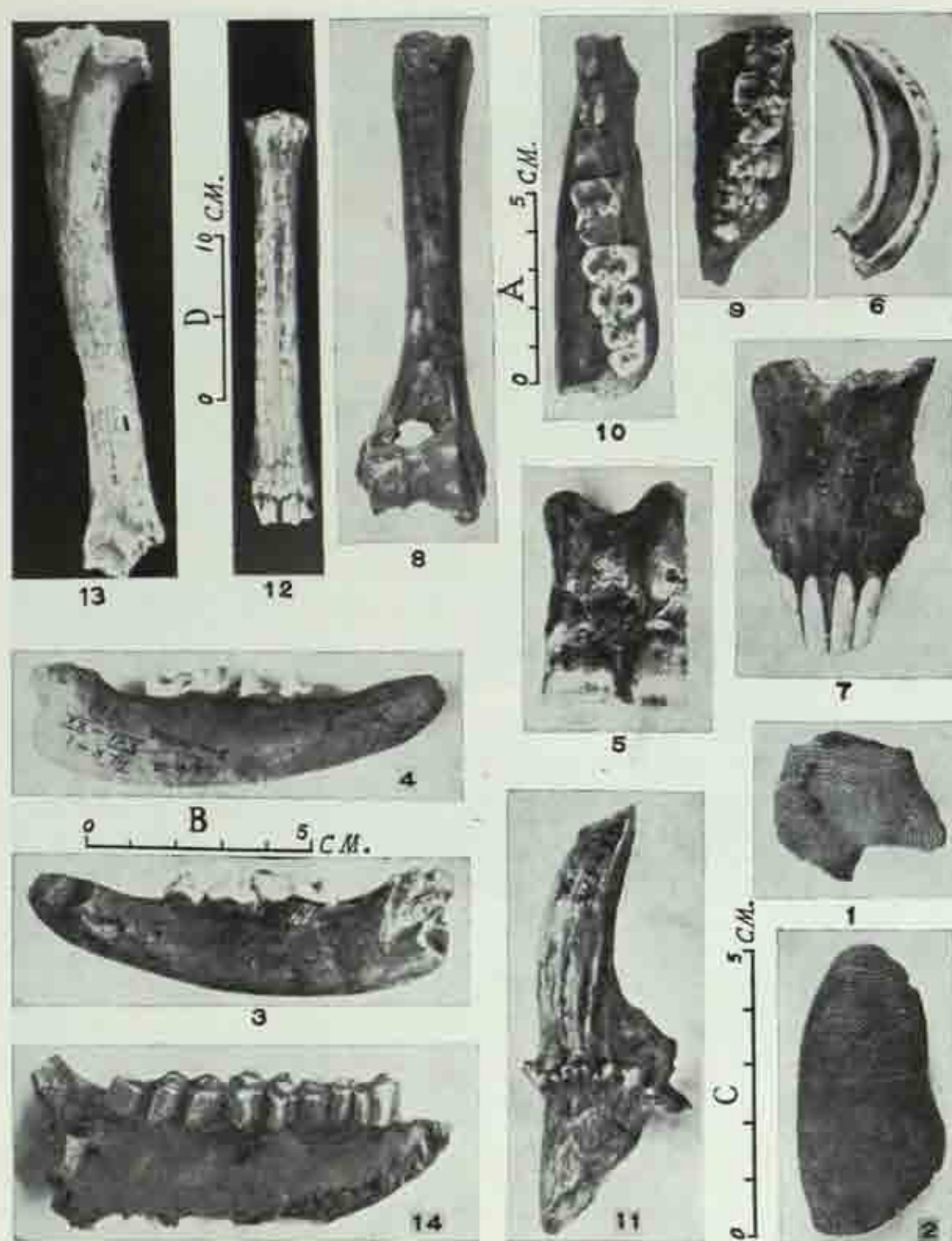
C



D



Kodan: decorated and perforated sherds. See p. 175



Animal-remains: 1, 3-11 and 14 from Tilaura-kot; 12 and 13 from Kodan; 2 from Harappa (for comparison)
 Scale A is for 1, 2, 7, 8, 9 and 10, scale B for 3, 4 and 14, scale C for 5, 6 and 11 and
 scale D for 12 and 13. See pp. 191 and 192



A. Lumbini: general view of the monuments and the ancient tank (behind the tree). See p. 196



B. Lumbini: brick structures. See p. 197



A. Lumbini: pillar of Aśoka. See p. 197



B. Lumbini: pillar of Aśoka, lower part. See p. 197



Lumbini: ancient sculpture depicting the nativity of Buddha. See p. 198



B. Lumbini: fragment of a sculpture with two standing figures extant. See p. 198



A. Lumbini: modern sculpture depicting the nativity of Buddha. See p. 198



A. Lumbini: head of Buddha. See p. 199



B. Lumbini: 1, Maitreya; 2, Buddha in *bhūmi-sparśa-mudrā*. See pp. 199 and 200



A. Lumbini: 1, lower portion of an image of Buddha; 2, fragment of a sculpture with head extant. See pp. 199 and 201



B. Lumbini: 1, fragment of a sculpture representing the Eight Great Miracles in the life of Buddha; 2, fragment of a sculpture representing a divine couple. See pp. 199, 200 and 201



Lumbini: Bodhisattva (Maitreya?). See p. 200



A. Lumbini: 1, head of Bodhisattva; 2, fragment of an image of Lokeshvara. See pp. 200 and 201



B. Lumbini: 1, torso; 2, image of Ganesha. See p. 201



A. Lumbini: four late sculptured plaques. See p. 201



B. Lumbini: terracotta architectural piece with the head of Buddha. See pp. 201 and 202



A



B

Lumbini: terracotta heads. See p. 202



A. Lumbini: terracotta heads. See p. 202



B. Lumbini: 1, terracotta female bust; 2, lower portion of a terracotta figure. See p. 202



A. Lumbini: fragment of a terracotta tile with kneeling figures. See p. 202



B. Lumbini: crudely-modelled bust of a terracotta figurine; 2, terracotta head. See p. 202



Lumbini: leaf-shaped plaque with a relief of Mañjuśrī (?) and the Buddhist creed. See p. 203



Lumbini: 1, bronze devotee; 2, bronze Bodhisattva. See p. 203



A. Lumbini: 1-4, terracotta beads; 5, stone bead; 6, jasper ear-stud; 7, Kushan coin. See pp. 203 and 204



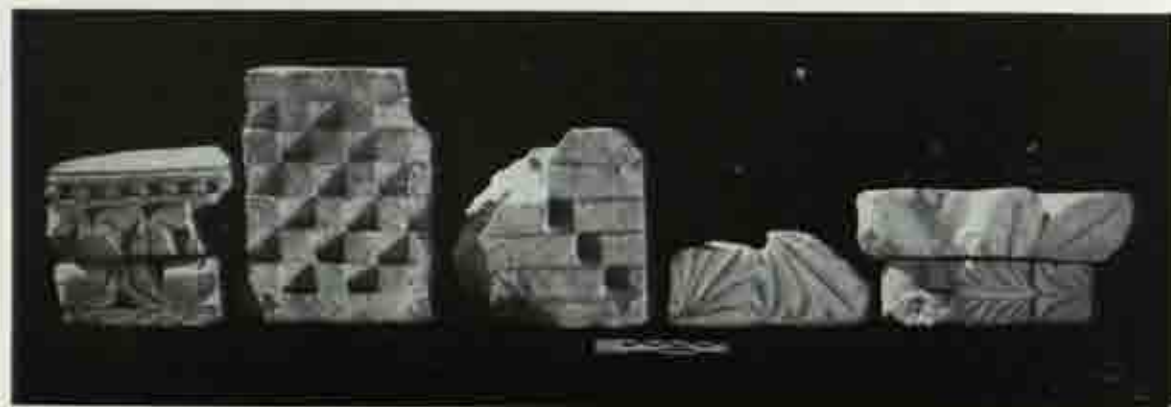
B. Lumbini: miscellaneous objects. See p. 205



A. Lumbini: terracotta dabbars. See p. 204



B. Lumbini: carved bricks. See p. 204



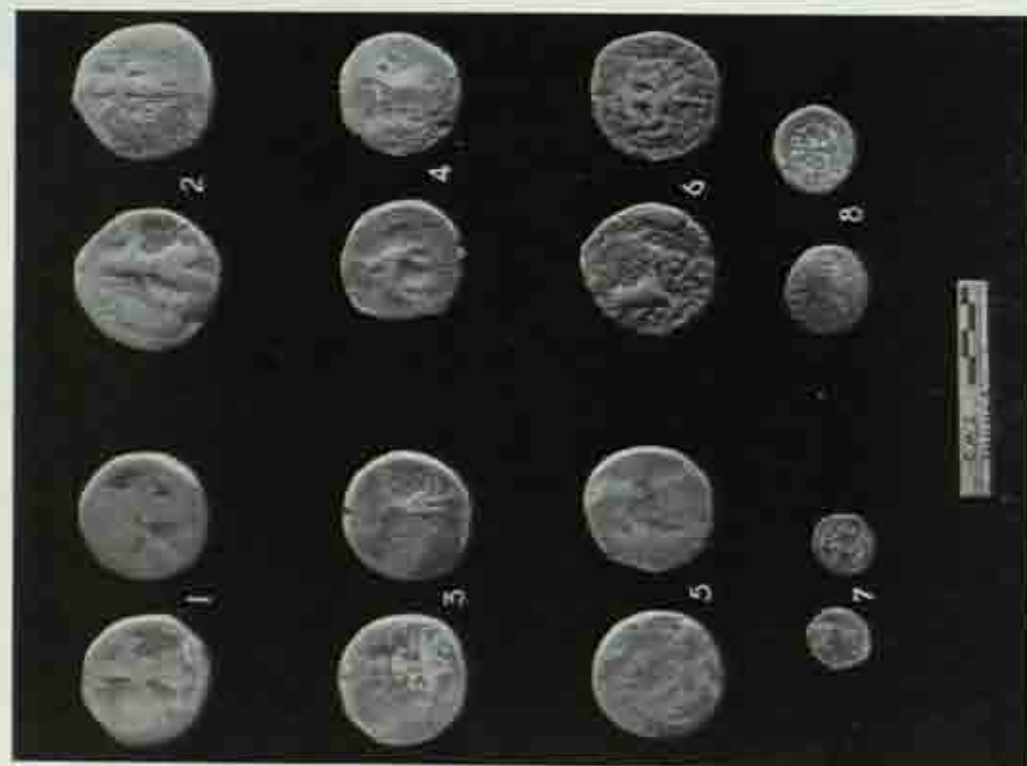
C. Lumbini: carved bricks. See p. 204



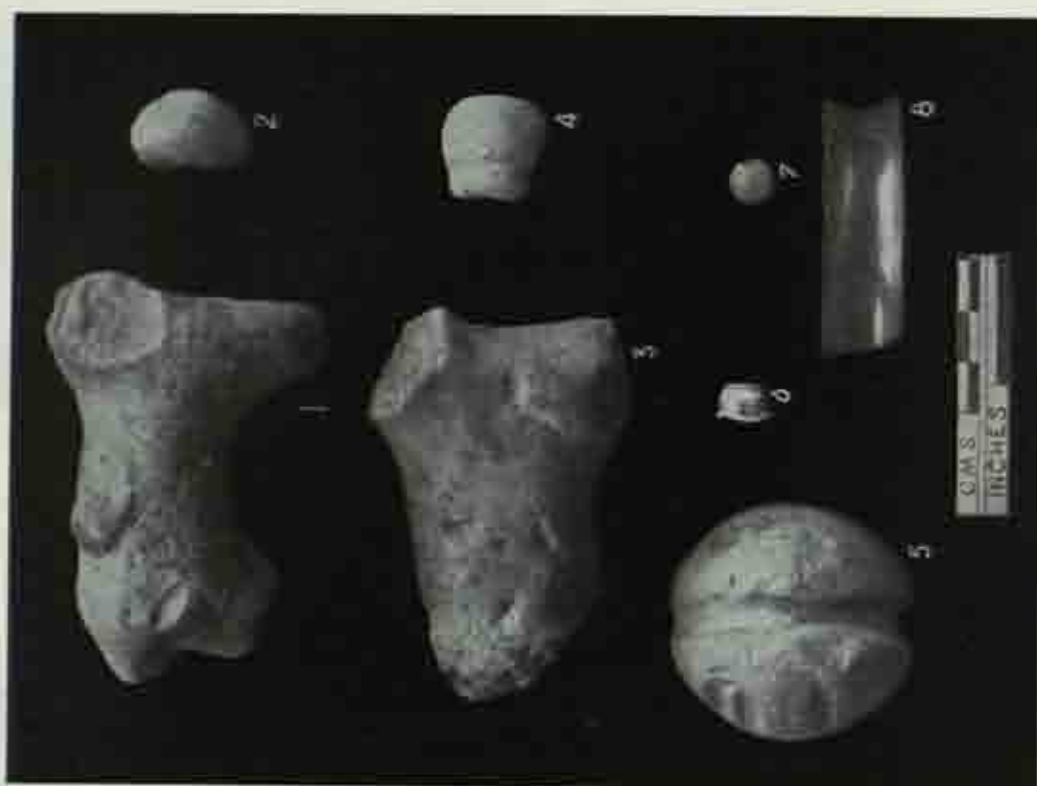
A. Nipania: part of the mound by the side of the Dano. See p. 205



B. Nipania: eroded section of the mound. See p. 205



A. Coins: 1, 5 and 6 from Sisania; 2 and 3 from Kadzahawa; 4 from Pipri; 7 from Lamtiya; 8 from Nipania. See pp. 207, 209, 212, 215 and 216



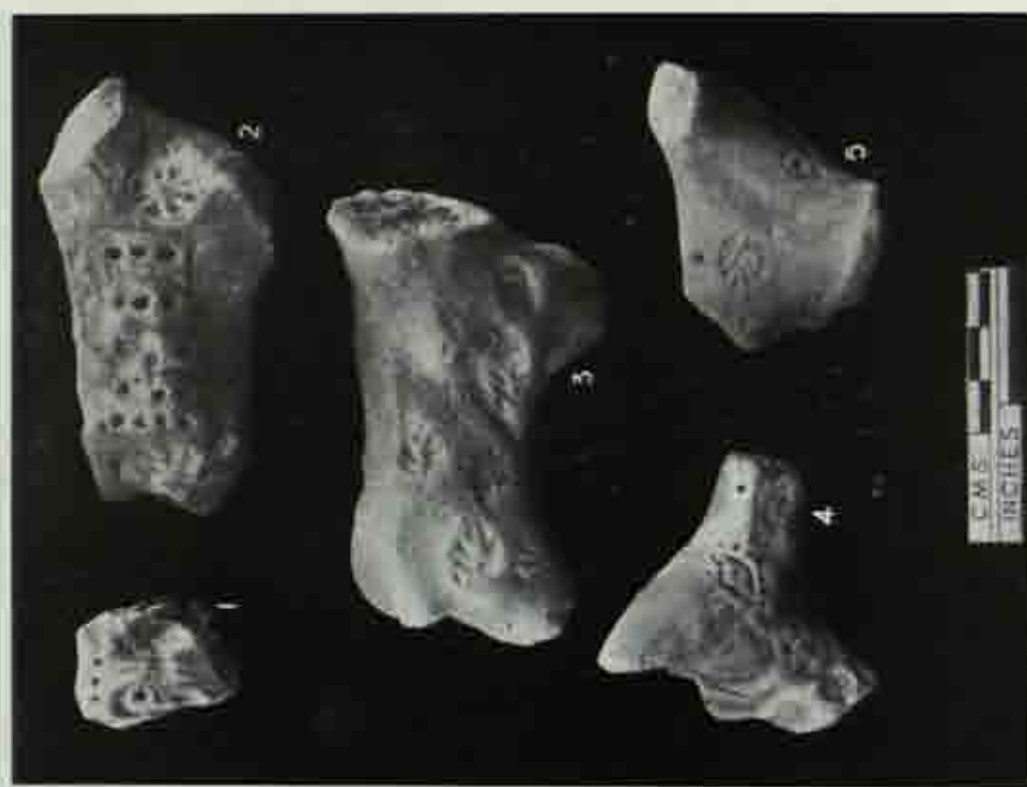
B. Nipania; 1 and 3, terracotta animals; 2, 4 and 7, terracotta beads; 5, terracotta net-sinker or loom-weight; 6, agate bead; 8, glass bangle. See pp. 207 and 208



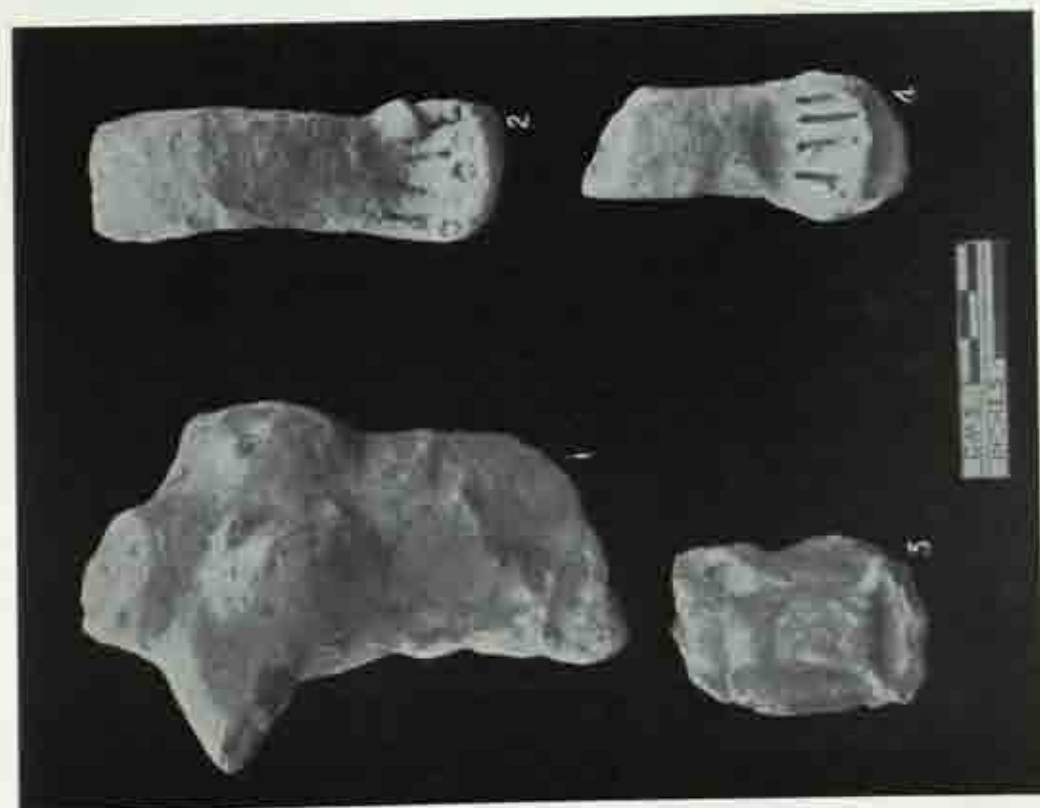
Pipri: 1, 2 and 3, terracotta human figurines; 4 and 5, terracotta beads; 6, perforated terracotta disc. See pp. 209 and 210



A. Pipri: 1, terracotta female figurine; 2, terracotta foot.
See pp. 209 and 210



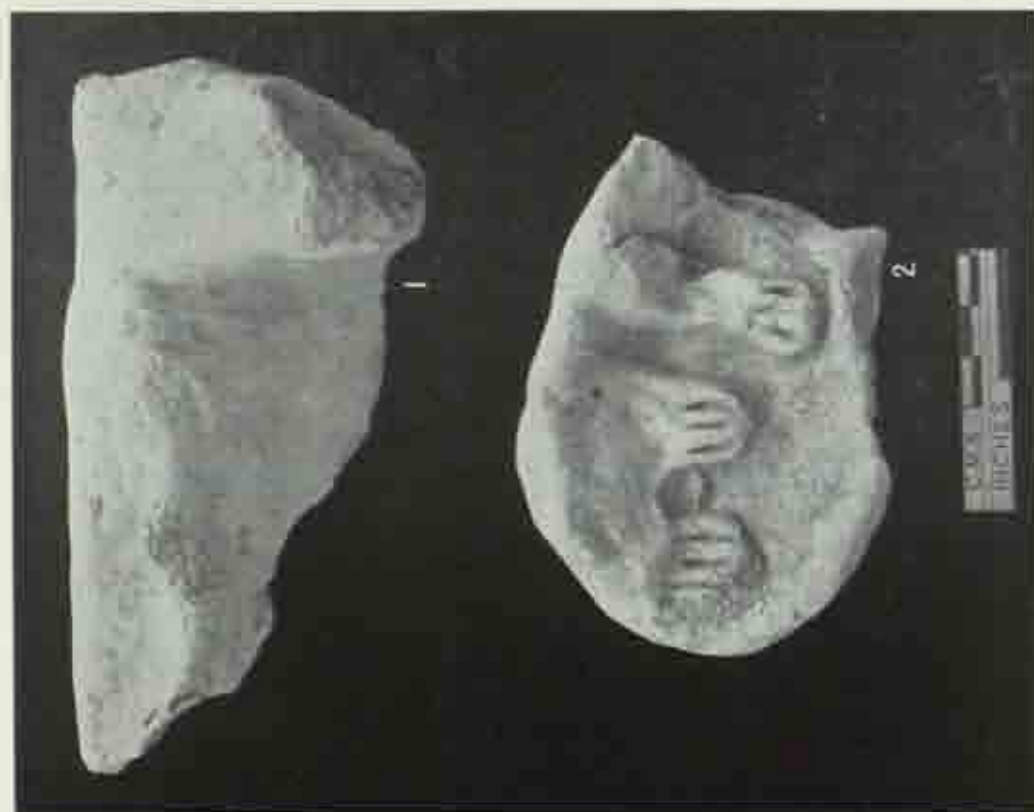
B. Pipri: terracotta animal figurines. See p. 210



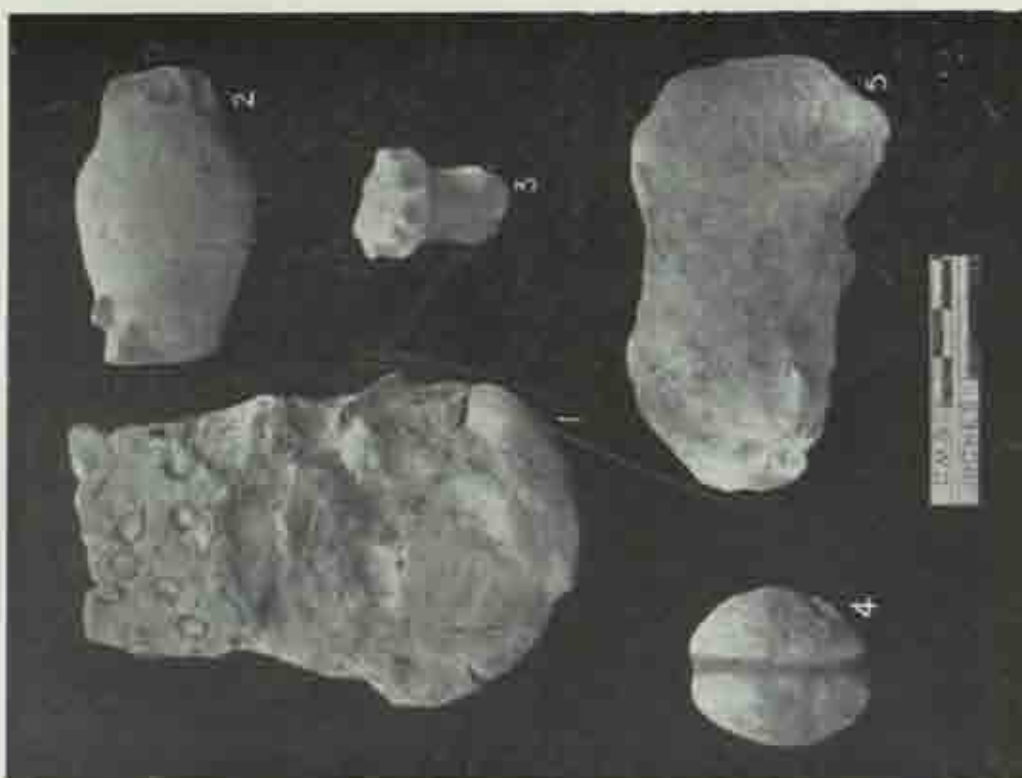
A. Kadzahawa: terracotta human figurines. See pp. 212 and 213



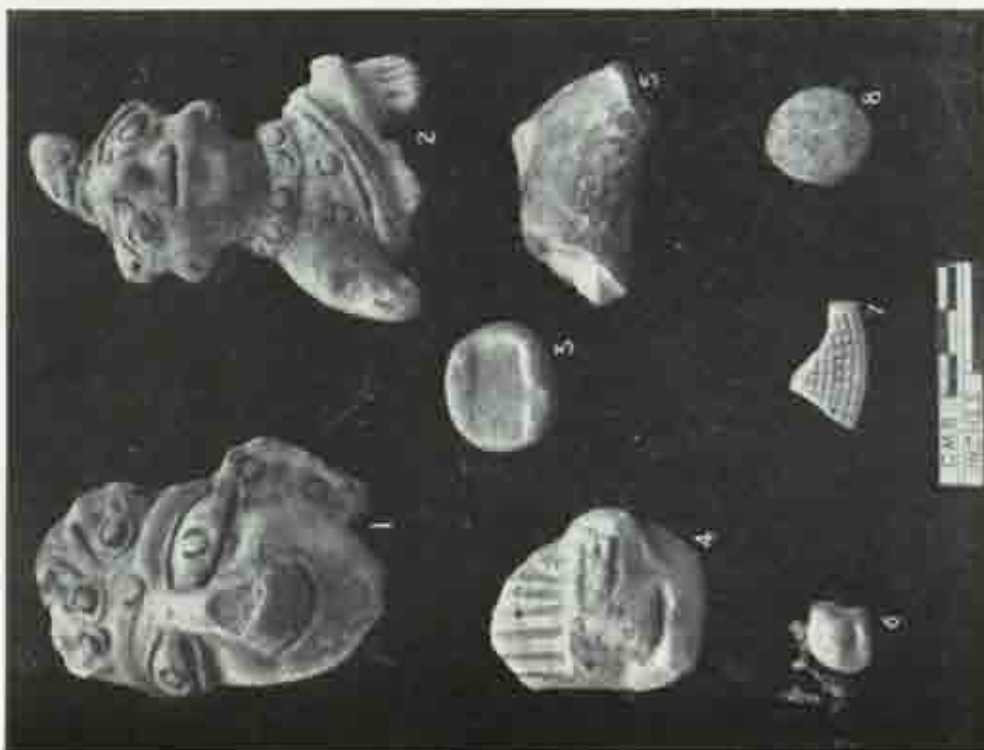
B. Kadzahawa: terracotta human figurines. See p. 213



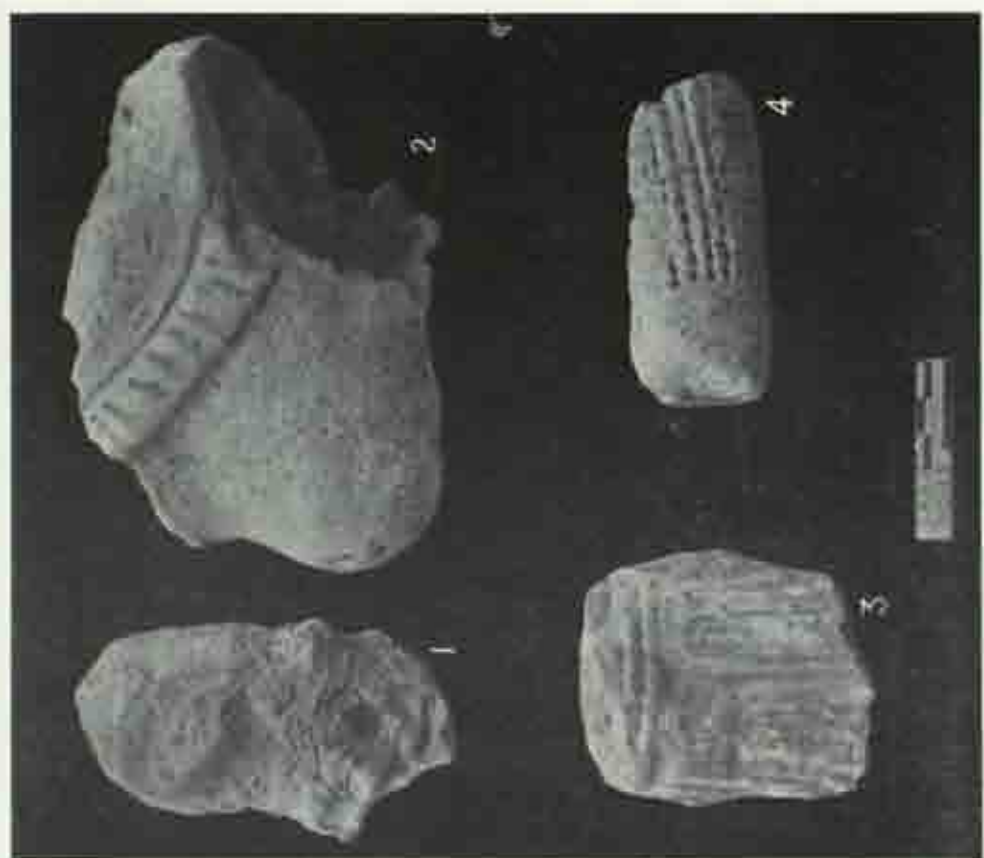
A. Kadzahawa; fragments of terracotta votive tanks. See pp. 213 & 214



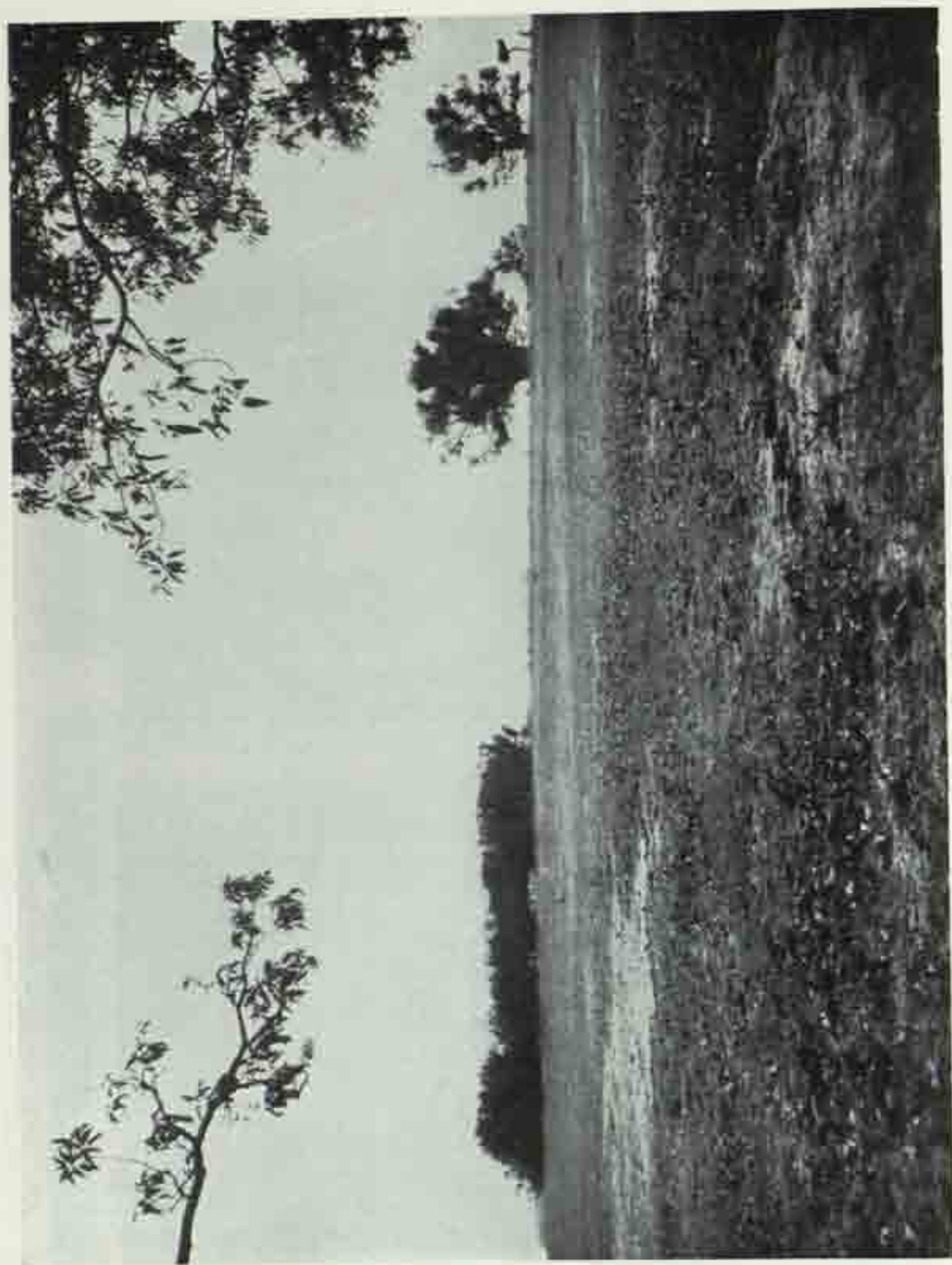
B. Kadzahawa; miscellaneous terracotta objects. See p. 214



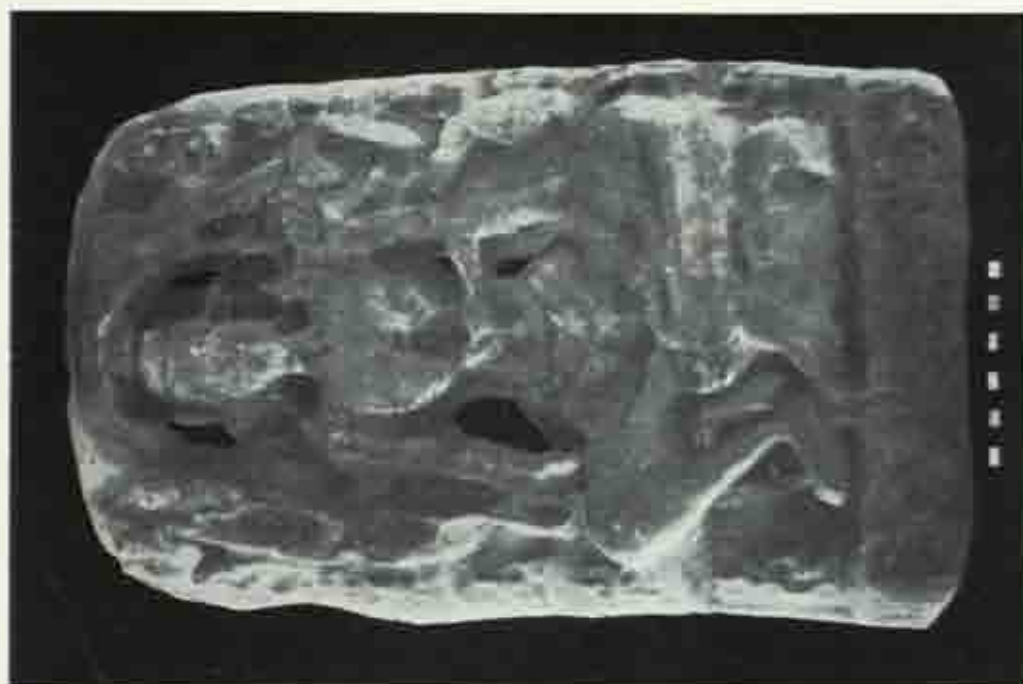
A. Terracotta objects: 1 and 2, human figurines from Bamhni; 3, animal torso from Bamhni; 4, sealing from Lamtiya; 5, head from Lamtiya; 6, bead from Lamtiya; 7, fragment of a stamp (?) from Lamtiya; 8, ball from Lamtiya. See pp. 215 and 218



B. Sisania: 1-3, terracotta human figurines; 4, terracotta muller-shaped object. See p. 217



Sisania: general view of the mound. See p. 215



B. Sonagarh: stone image of Chālmunda.
See pp. 161, 219 and 220



A. Miscellaneous terracotta animal figurines: 1, and 3 from
Sirinagra; 2 from Hardeva; 4 from Bijua; 5 and 6
from Patkubawa. See pp. 219, 222, 224 and 225



A. Sonagarh: ruined brick structure. See p. 220



B. Sonagarh: ruined wall of a brick structure. See p. 220

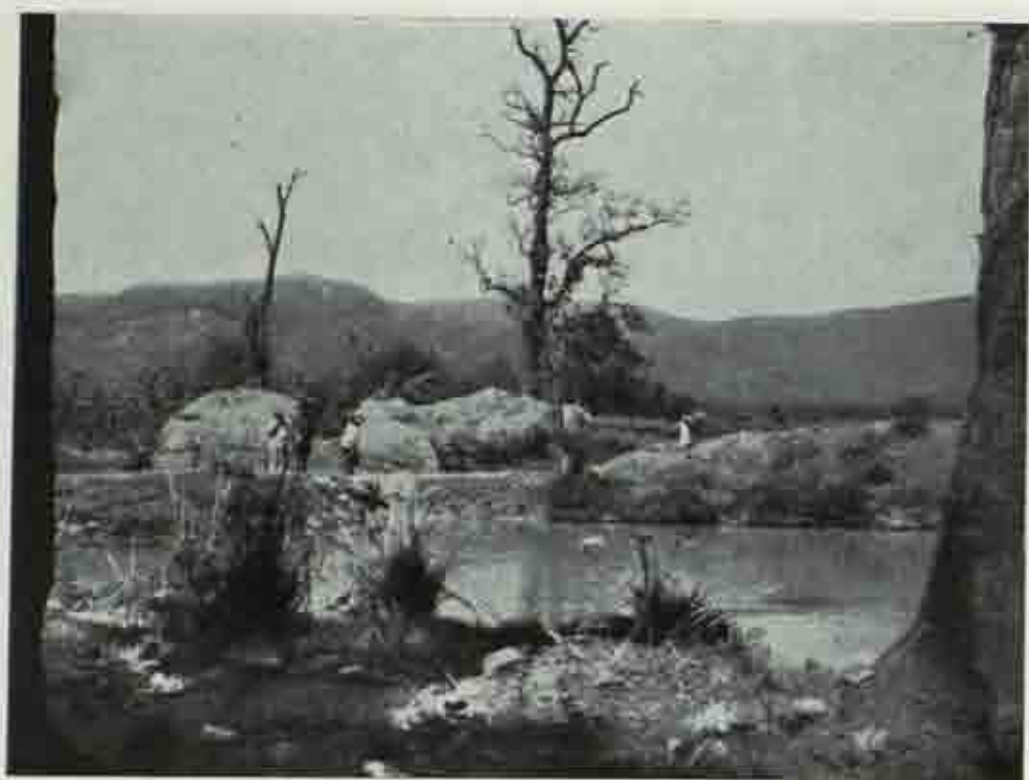


A. Sonagarh; the Sukhrbel. See p. 220



B. Sonagarh; ruins of brick structures choked with jungle. See p. 220

PLATE CXLII



A. Bankatwa village near Saina-Maina. See p. 221



B. Saina-Maina; first rise of the hill. See p. 221



A. Saina-Maina: inscribed pillar. See p. 221



B. Saina-Maina: damaged *amalaka*. See. p. 221



A. Saina-Maina: door-jamb. See p. 221.



B. Saina-Maina: lintel. See p. 221



A. Chaganth: Thāru hut. See p. 223



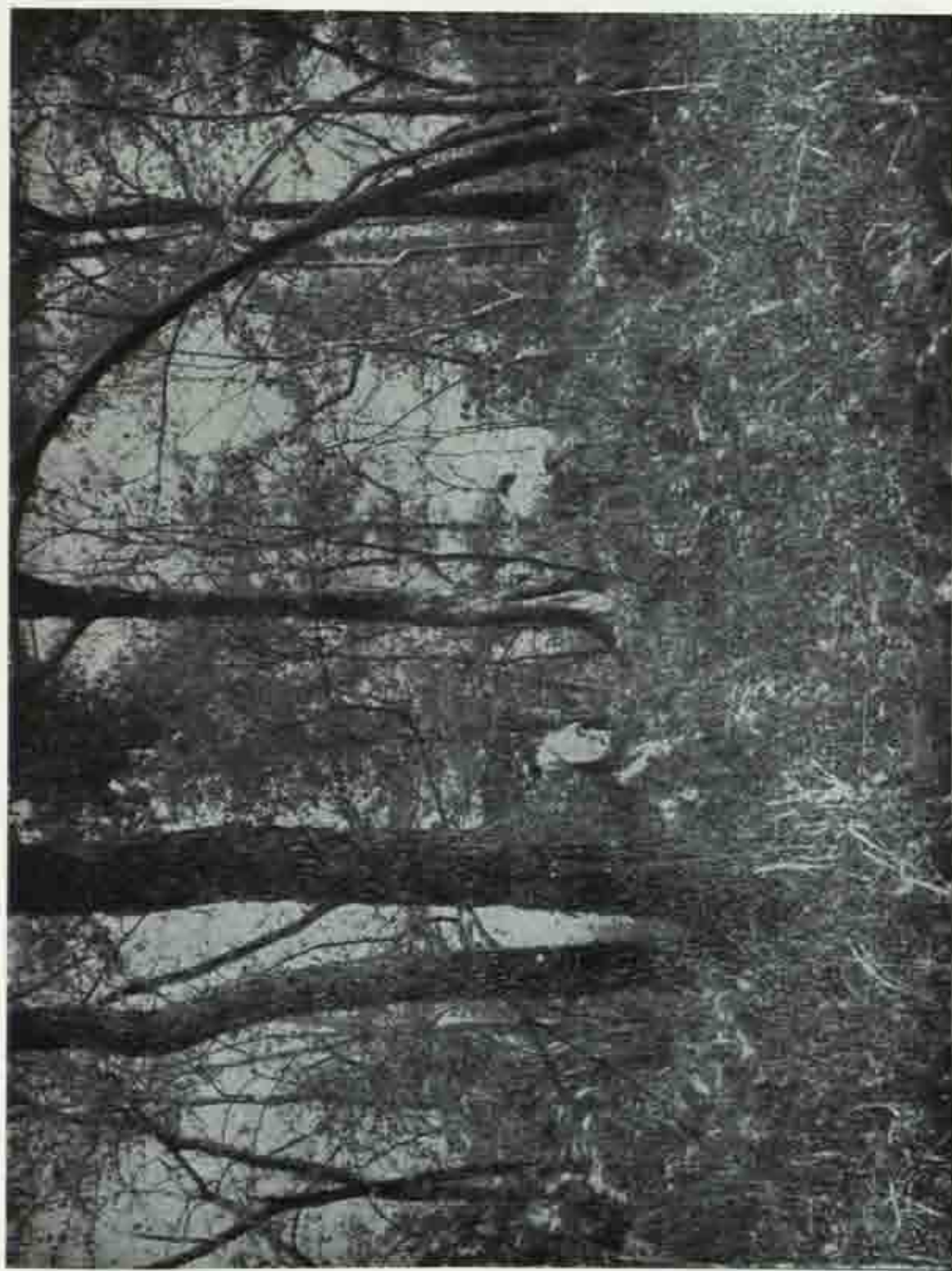
B. Chaganth: Thāru family. See p. 223



A. Chaganth: Thāru woman at basket-work. See p. 223.



B. Chaganth: ruined brick structure. See p. 223.



Chaganth: jungle-clad mound. See p. 223



A. Hill overlooking Patharkot. See p. 224



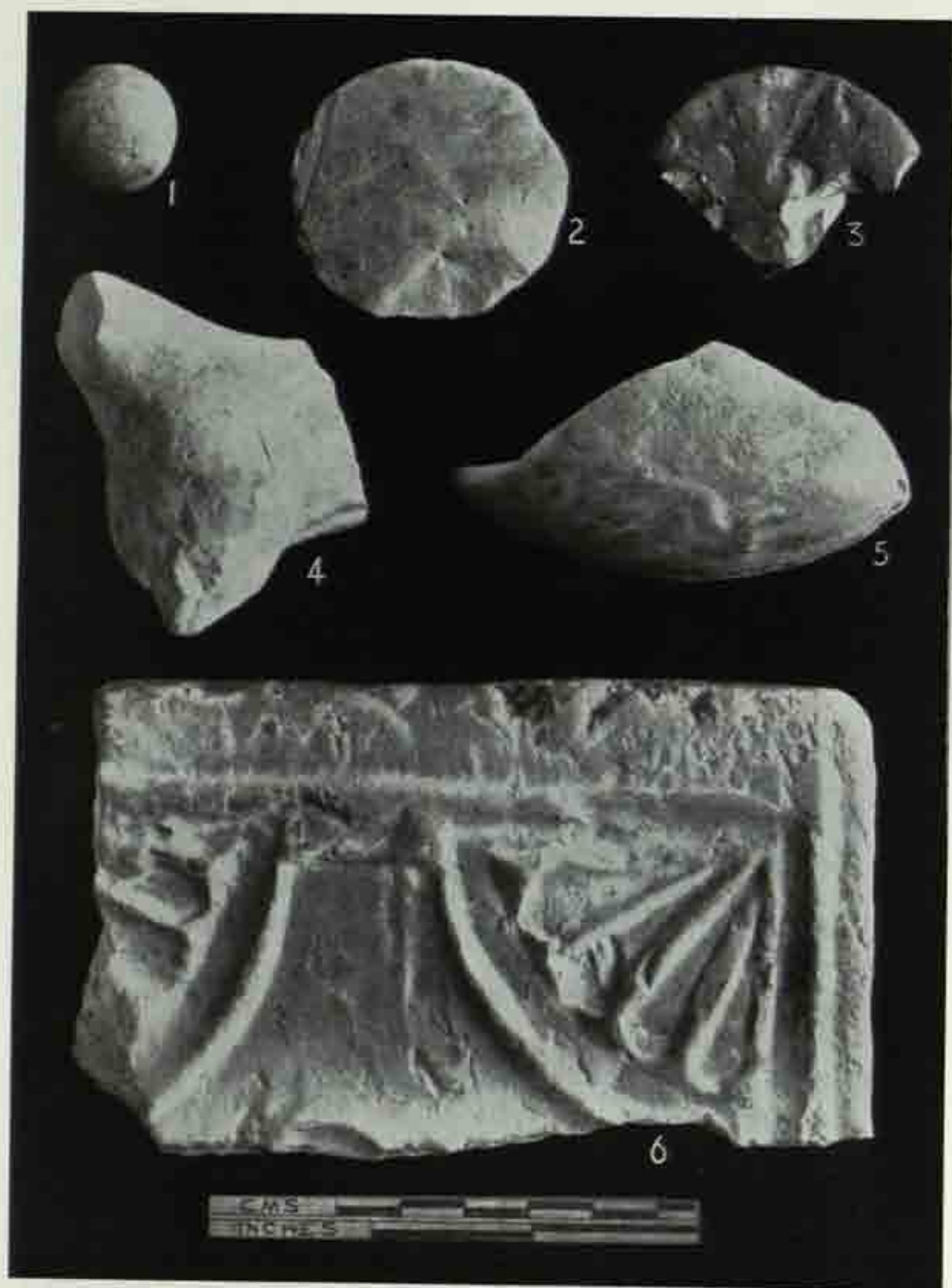
B. Patharkot: shops. See p. 224



A. Patharkot: porters. See p. 224



B. Patharkot: mound. See p. 224



Miscellaneous terracotta objects: 1, ball from Patharkot; 2, disc made of sherd from Piprahwa; 3, fragment of a disc from Sihokhor; 4, animal from Sihokhor; 6, moulded tile from Sihokhor; 5, lower part of a dabber from Chaganth. See pp. 224, 226 and 227



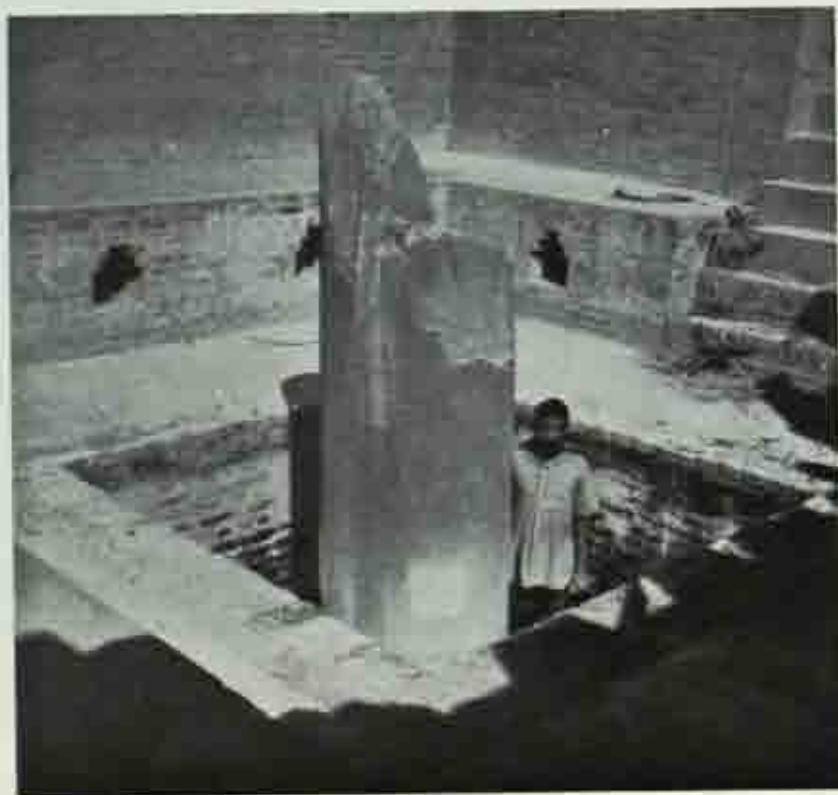
A. Dohri: general view of the mound. See p. 227



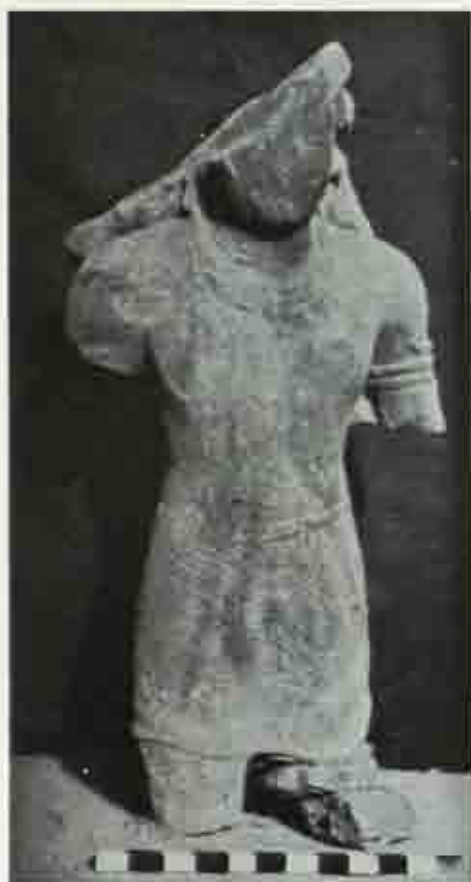
B. Dohri: votive offerings in the form of terracotta animal figurines. See p. 227



A. Gotihawa: *stūpa* covered by cow-dung cakes. See p. 229



B. Gotihawa: pillar. See p. 228



A. Dohni: image of Vishnu (?),
front view. See p. 229



B. Dohni: image of Vishnu (?),
back view. See p. 229

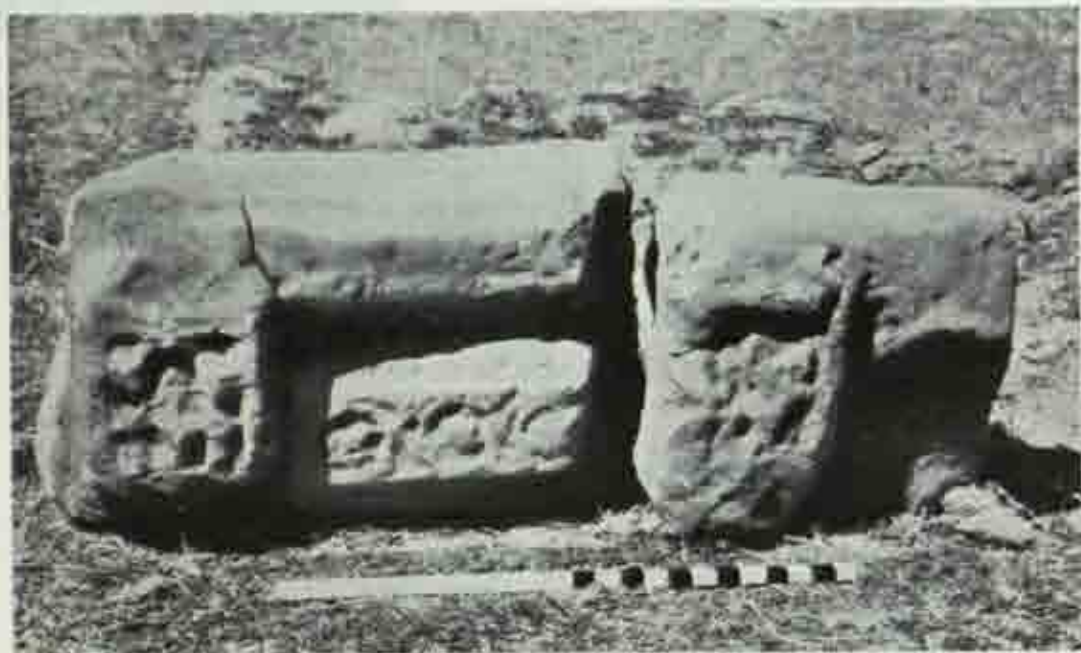


C. Dohni: two fragments of an image of Sūrya. See pp. 229 and 230

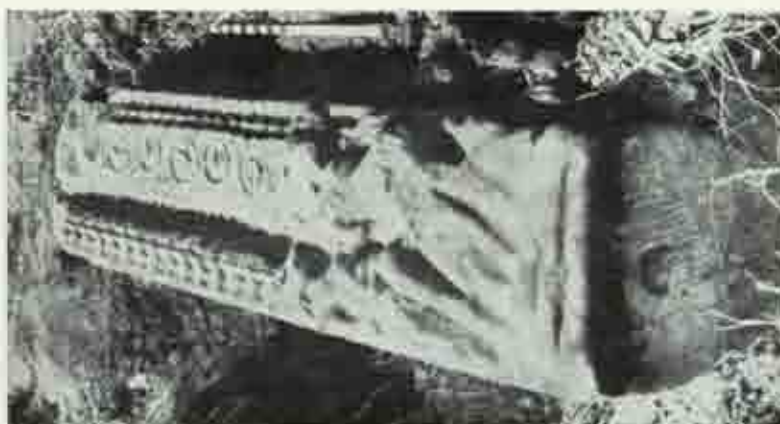
PLATE CLIV



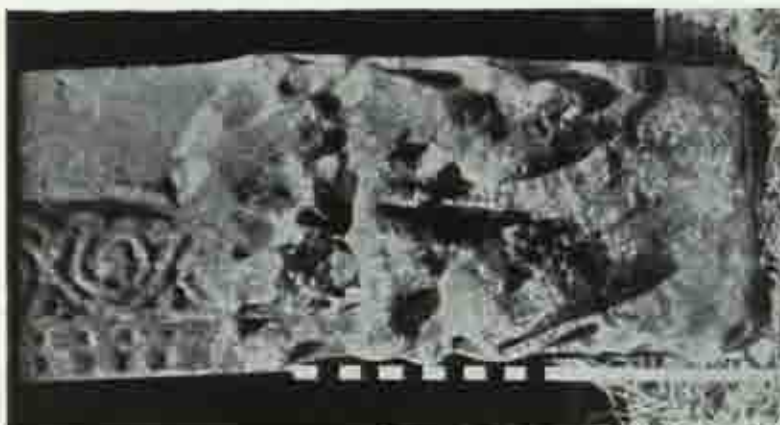
A. Siwalwa: general view of the mound. See p. 230



B. Siwalwa: two fragments of a lintel. See p. 231



C. Siwalwa: left door-jamb.
See p. 231



B. Siwalwa: lower part of the right
door-jamb. See p. 230



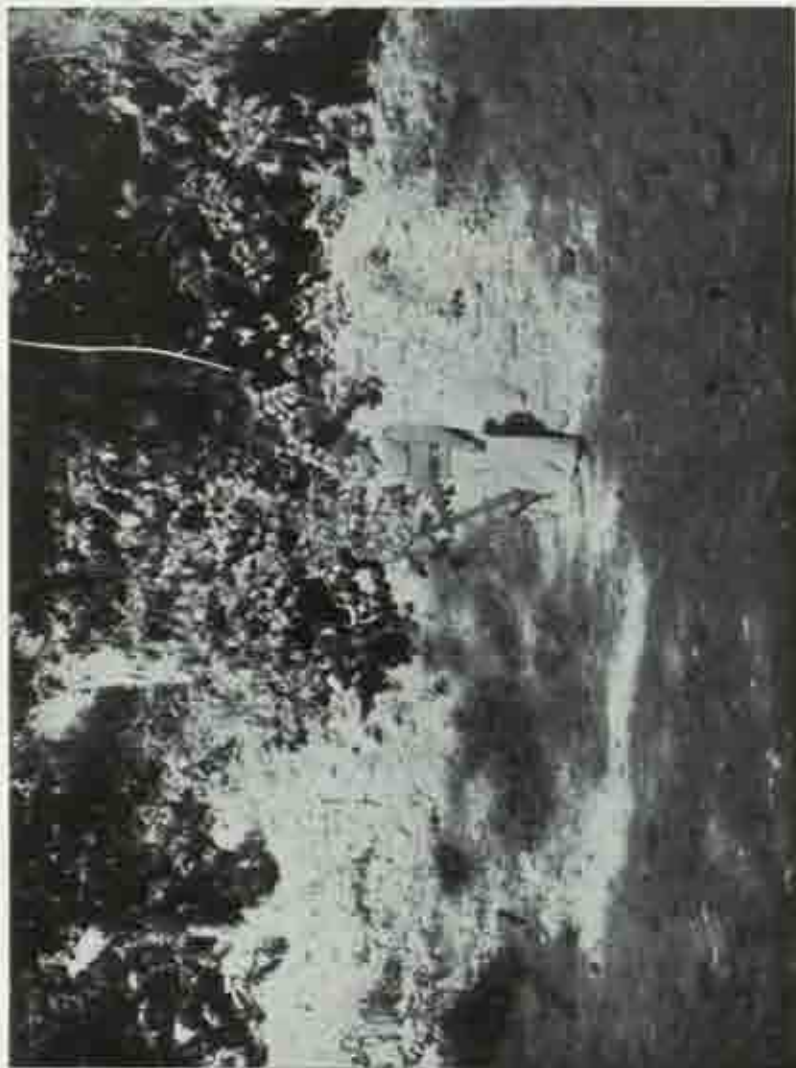
A. Siwalwa: right door-jamb.
See p. 230



A. Siwalwa: door-sill. See p. 231



B. Siwalwa: door-step (?). See p. 231



A. Chatradī: jungle-clad ruins. See p. 248.



B. Patna: image of Gangā: See p. 248.

PLATE CLVIII



A. Nigali-sagar: general view of the tank with the pillar of Aśoka in the foreground. See p. 249



B. Nigali-sagar: upper fragment of the pillar of Aśoka. See p. 249



A. Nigali-sagar : middle fragment of the pillar of Aśoka. See p. 249



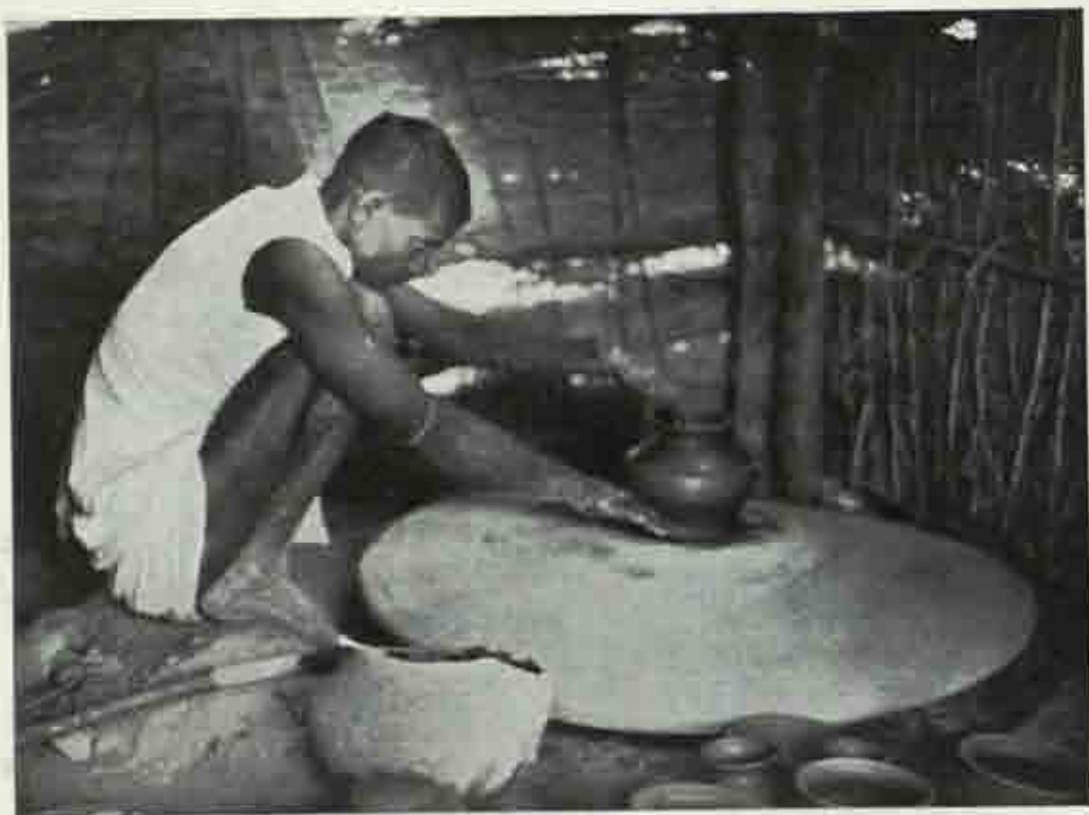
B. Nigali-sagar : inscription of Aśoka on the middle fragment of the pillar. See p. 249



A. Lausadiya: potters' residence. See p. 250



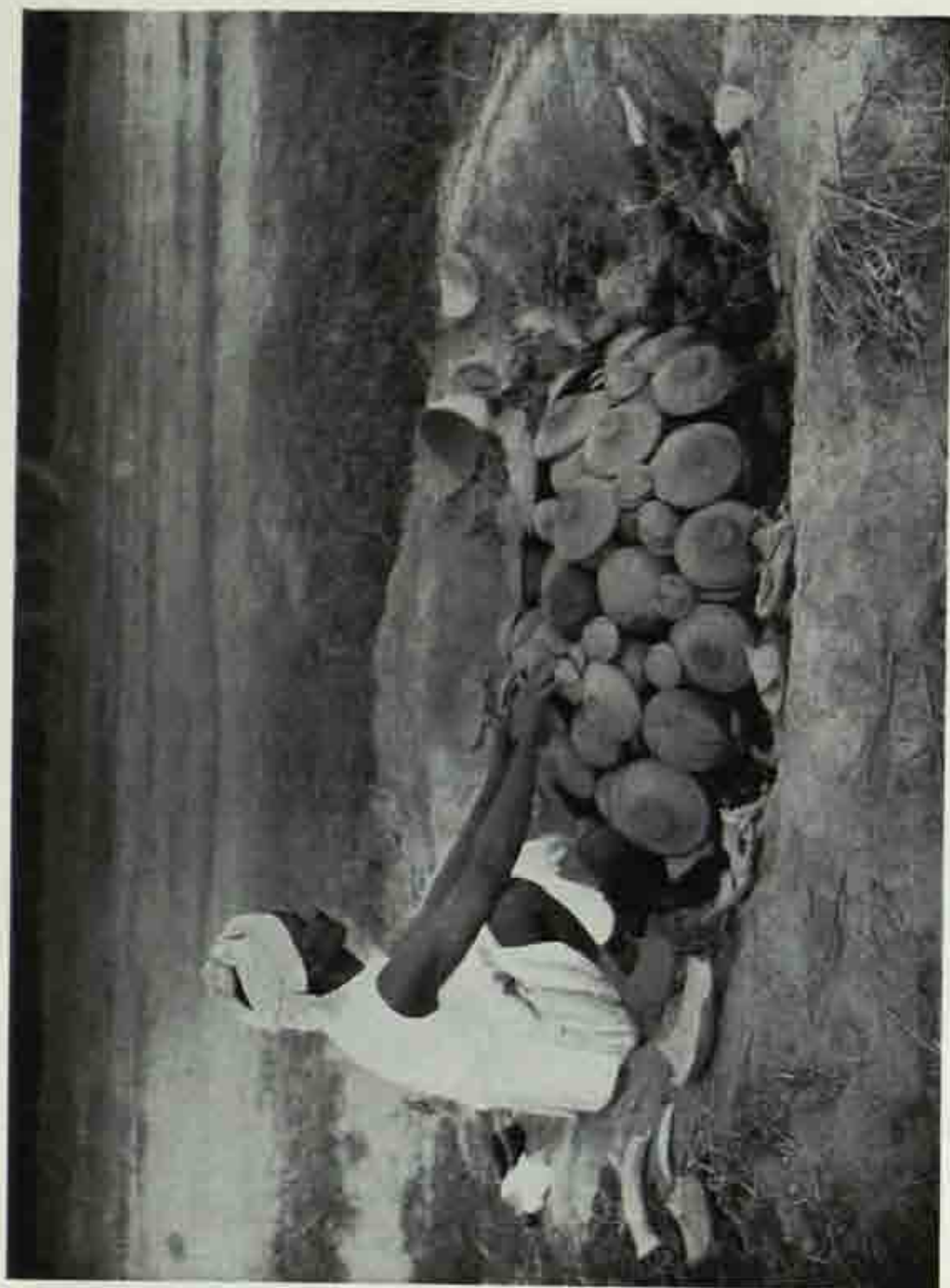
B. Lausadiya: potter at work. Note that the wheel is not spoked but solid. The potter works indoor. Terracotta dabbers, wooden beaters and earthen basins, with which the pots are given the desired shape, are seen in the foreground. See pp. 250 and 251



A. Lausadiya: pot on wheel. See p. 250



B. Lausadiya: kiln—an open shallow pit. See p. 251



Lausadiya: sun-dried pots heaped up on a bed of dried cow-dung within the kiln. See p.251



A. Lausadiya; heap of pots covered with dried cow-dung. The potter is ready with straw. See p. 252.



B. Lausadiya; potter applying a thin clay-coat over the shroud of straw. See p. 252.



A. Lausadiya: clay-coated heap. See p. 252



B. Lausadiya: fire in the process of being lit through the central shaft with the help of burning cow-dung cake. See p. 252



CATALOGUED

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT OF INDIA
Department of Archaeology
NEW DELHI

Please help us to keep the book
clean and moving.
